
Dissertation

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

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Graduate Program in Geography

The Ohio State University

2011

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Abstract

This dissertation interrogates connections between agricultural restructuring, development of rural livelihoods and conservation of agricultural biodiversity (agrobiodiversity) in Turkey, a center of origin and diversity for wheat domestication. Often, crisis narratives accompany these connections, reflected as simplified assumptions about transformations of nature, livelihoods and the state under neoliberalism. Through a multiscalar analysis that attends to state-international relations, ways the state articulates development and conservation policies and ways farmers engage with these policies, this dissertation argues that the crisis narrative is used to justify dominant solutions for conservation of agrobiodiversity and development of livelihoods. By engaging with different aspects of transformation under neoliberalism, in particular Turkey’s 2006 Seed Law, the World Bank funded Agricultural Reform Implementation Program, and changes due to European Union accession, the dissertation treats current transformations as a snapshot of complex change for the role of the state, farmers’ livelihoods and conservation of agrobiodiversity.

The dissertation shows how neoliberal development and conservation practices have come to dominate (and yet appear beyond the reach of) global economic, political and environmental policy circles, and demonstrates the effects of such practices on access to agrobiodiversity and livelihood strategies. The dissertation is based on empirical
research and archival work conducted in Turkey over eight months between 2007 and 2010. Methods included (1) semi-structured interviews with state officials and representatives of international, farmer and non-governmental organizations in Ankara and (2) ethnographic research and participant observation in the villages of two provinces in northwest and central Turkey, Kastamonu and Sivas, where traditional wheat varieties are grown. I link the empirical findings to broader analysis that connects North and South by drawing on postcolonial theory, development geography and political ecology to make two broad arguments. (1) Instead of a moment of crisis that can be solved through neoliberalism, current development practices in Turkey reflect both power struggles within the state and the historical continuity of earlier state projects of modernization and Europeanization. (2) The effects of markets on conservation of agrobiodiversity and livelihoods were diverse and contingent on internal dynamics of perceptions and articulations of farmers with external dynamics of interventions at local or national scale. As a result, neoliberal conservation cannot fulfill its double promise of serving livelihoods and conservation of nature.

By challenging the crisis narrative, these findings contribute to our understanding of sustainability of development and conservation more broadly, particular with regard to food security, farming communities, and crop improvement in developing country contexts. First, these findings show that neoliberalism translates into local contexts through a process of articulation, reworking and negotiating of economic and conservation policies, reminding us of the friction caused by physical nature in neoliberalization. Second, these findings challenge the neoliberal premise that markets
always can provide development and conservation better than the state or international organizations. Third, the dissertation deepens the discussions on neoliberal subject formations by discussing the limited role of farmers in neoliberal conservation practices in relation to the state’s contradictory goals of encouraging agrobiodiversity use by farmers and maintaining sovereignty over plant resources.
Dedicated to

James and Melisa Nur
Acknowledgements

There are many people who have supported and engaged in this project. I deeply appreciate all the assistance and support I received throughout the process of preparing this dissertation. The Ohio State University Environmental Policy Initiative and OSU Geography Department Robert Thomas Award provided financial assistance that made this research possible. The material in this dissertation is also based on work supported by the National Science Foundation (Grant Number 0825532). Any opinions, findings, conclusions or recommendations expressed in this dissertation are those of the author and do not necessarily reflect the views of the National Science Foundation or other granting agencies.

As part of the research that went into this project, I must thank everyone in Turkey who offered support and guidance and agreed to take part. In particular, I thank Necmi Aladağ, Suat Arslan and Salim Kabaca in Ihsangazi, Kastamonu; and Fatoş Tatar, Mehmet Tatar and Elif Fidanoğlu in Gürün, Sivas. In Ankara, Kastamonu and Sivas, Metin Acar, Tayyar Açık, Mustafa Afacan, Halil Agah, Erol Akar, Dr. Doğan Akar, Baturay Altınok, Yasin Akpınar, Hamdi Aydın, Dr. Necmettin Bolat, Bilgi Buluş, Dr. Erol Çakmak, Melek Çakmak, Zühtü Danacı, Sunay Demircan, Ayhan Elçi, İhsan Emirlioğlu, Dr. Vehbi Eser, Setki Gökalp, Davut Göl, Ali Özlem Güvenir, Melike Hemmami, Nazmi Ilıcalı, Serdar İzbeli, Mehmet Kaya, Dr. Mesut Keser, Murat
Küçükçongar, Zafer Öz, Hacı Ömer Şahin, Tuna Özgül, Adem Öztürk, Bülent Öztürk, Duygu Soyer, Bora Sürmeli, Emine Şahin, Dr. Ayfer Tan, Nejdet Taşdemir, Fatih Taşdoğan, Ali Tunaboylu, Dr. Levent Yener, Dr. Kamil Yılmaz, Irfan Yokuş, among others, generously gave their time in support of this project. I gratefully acknowledge the Baku-Tbilisi-Ceyhan Consortium for providing photographs. I would like to thank especially Dr. Alptekin Karagöz, now at Aksaray University, for reviewing research sites in the early phases of my research and for offering valuable suggestions at the writing stage. I also thank Selçuk and Emrullah Deligöz and Meryem Uğuz, who assisted with the focus group discussions.

I gratefully acknowledge the contributions of my instructors at the Ohio State University, who have been inspirational and instrumental throughout the preparation of this dissertation. My committee members, Drs. Joel Wainwright, Mathew Coleman, and Kendra McSweeney, provided critical guidance and support. This project would not have been possible without them. Drs. Nancy Ettlinger, Kevin Cox and Timothy Choy offered intellectual stimulation through engaging seminars and conversations that helped me understand this project better. I especially thank my faculty advisor, Dr. Becky Masfield, for her patience, guidance and intellect. Her efforts through the years and commitment to her students have made me a better scholar and writer and allowed me explore new creative directions for this dissertation.

My friends have also provided intellectual support and company, which made the research and dissertation process an enjoyable one. In particular, my thanks to Zulal Akın, Yiğit Akın, Chris Hartmann, Suzanna Klaf, Austin Kocher, Emine Kuzutürk,
Seung-Ook Lee, Rohit Negi, Tim Hawthorne and Hale Yıldırımy Sager for their friendship and support during my graduate studies. I am especially thankful to Jeff Olson for the maps and to Jim Weeks for editorial assistance. Eveily Freeman, April Luginbuhl-Mather and Zoe Pearson have not only been wonderful friends, but also provided editing expertise to make this thesis more readable.

My extended family and in-laws also deserve special thanks. My parent-in-laws, Mary and James A. Helicke, have been a great source of support and they have become a second set of parents and made me feel at home in this country. My husband’s grandparents Virginia and Clarence Allender, provided their love, prayers and delicious food. My sister, Nurdan A. Çayırezmez, has been a great source of wisdom and encouragement. My brother, Yusuf Atalan, and my brother-in-law, Mehmet Çayırezmez, were particularly helpful with technical aspects of this project, including saving a crashed computer. Without them, the images and the dissertation would not be here today. I am especially grateful to my parents, Nuriye and Ekrem Atalan, for their love, support and trust in me. I am thankful for all the opportunities they have provided throughout my life and their assistance during this research project, which included spending time with us in the field, taking caring of my daughter, and driving me to interviews. Their support and their encouragement at every stage of that made it possible for me to be where I am today.

Above all, I would like to thank my husband, James C. Helicke, for his love, companionship, patience and intellect. Without his support and assistance at every stage, the research would not have been possible. His advice, editorial assistance, and
discussions on Turkey have made this dissertation more readable. His support also included traveling with me and staying in rural areas in Turkey in 2009. He took care of our house and our daughter, which allowed me to focus on my studies. I am blessed to have my two-year old daughter Melisa Nur, who has made me a more caring, fun and organized person during the dissertation process.

Finally, I would like to thank to all the villagers in Kastamonu and Sivas, who met with me during my fieldwork. Without their inspiration, hospitality and openness, I would not have understood the complexity of development and changes in conservation in Turkey.
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# Table of Contents

Page

Abstract .................................................................................................................. ii
Dedication ................................................................................................................ vi
Acknowledgements .................................................................................................. vi
Vita .......................................................................................................................... x

List of Figures ......................................................................................................... xiv
List of Abbreviations ............................................................................................... xv

Chapters

1. Situating Agricultural Restructuring: The Politics of Development and Conservation .................................................. 1
   1.1. Introduction: Situating Complexity of Agricultural Change within Development and Conservation ....................................... 1
   1.2. Research Questions ........................................................................................................ 4
      1.3.1. Neoliberalization of Nature and Conservation ........................................ 7
      1.3.2. The State, Development Geographies and Postcolonial Theory ......................................................... 11
      1.3.3. Political Ecology ................................................................................................. 14
   1.4. Contributions of the Dissertation .................................................................................. 18
   1.5. Research Strategies, Research Sites and Methods .......................................................... 21
      1.5.1. Research Sites ................................................................................................... 23
      1.5.2. Archival Work .................................................................................................... 31
      1.5.3. Semi-structured Interviews and Participant Observation .................................... 32
      1.5.4. Focus Group Discussions .................................................................................... 34
   1.6. Where is Home? Where is the Field? Notes on the Researcher ..................................... 34
   1.7. Summary and Plan of the Dissertation ........................................................................... 37

2. Development Geographies and the Neoliberal State: Postcolonialism, State Theory and the Power of Neoliberalism ......................................................................................... 42
   2.1. Introduction .................................................................................................................. 42
   2.2. Insights from Postcolonial Theory: Agricultural Modernization and Development Interventions ................................................................. 45
2.3. Development Without the State? Structural Adjustment Programs and External Intervention .................................................. 51
  2.3.1. From self-sufficiency to global markets: SAPs and Development .......................................................................... 53
  2.3.2. Power Asymmetries and Development .................................................................................................................. 57
2.4. The Neoliberal State and Development ......................................................................................................................... 60
2.5. State Theory: State as a Social Relation and Hegemonic State Projects ........................................................................ 65
2.6. Conclusion .................................................................................................................................................................................. 70

3. The Turkish State and Development: Agriculture through Modernization, Neoliberalization and Europeanization .................................................. 74
  3.1. Introduction .............................................................................................................................................................................. 74
  3.2. Continuity: Agriculture, Development and the Turkish State ......................................................................................... 78
  3.3. Agricultural Modernization in the Early Republic and State Intervention in Development ............................................. 81
  3.4. Agricultural Modernization: The Green Revolution and Global Integration ........................................................................ 84
  3.5. Development Without the State? The Power of International Organizations and the Turkish State during the Agriculture Reform Implementation Program (ARIP) ........................................................................ 90
  3.6. European Union Accession as Turkey’s “Hegemonic Project” ..................................................................................... 98
  3.7. Conclusion .................................................................................................................................................................................. 104

4. Seed Governance at the Intersection of Multiple Global and Nation-State Priorities: Modernizing Seeds in Turkey .................................................. 108
  4.1. Introduction: The Changing Shape of Seed Governance ................................................................................. 108
  4.2. Seed Governance at The Intersection of International and National Goals ......................................................................................... 111
  4.3. The Seed in Turkey’s Modernization Project ............................................................................................................... 114
  4.4. Contradictory Aspects of Global Governance of Seeds ............................................................................................... 117
    4.4.1. Regulating use of commercial seeds: variety protections and property rights .................................................. 118
    4.4.2. Regulating farmer-saved seeds: the changing definition of “farmer privilege” ........................................... 123
    4.4.3. Regulating use of naturally occurring plants: property rights meets biodiversity conservation .................. 127
  4.5. Conclusion .................................................................................................................................................................................. 131

5. Markets for Agricultural Biodiversity: The Development of Livelihoods and Conservation of Nature .................................................. 134
  5.1. Conundrums of Markets and Agrobiodiversity Conservation .................................................................................. 134
  5.2. Vantage Point .................................................................................................................................................................................. 138
List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1: Map of Turkey and the research provinces</td>
<td>25</td>
</tr>
<tr>
<td>1.2. Map showing the research districts and villages</td>
<td>26</td>
</tr>
<tr>
<td>1.3. Traditional wheat variety (<em>T. aestivum</em>, <em>zeron</em>), in Sivas</td>
<td>29</td>
</tr>
<tr>
<td>1.4. Traditional wheat variety einkorn (<em>T. monococcum</em>), in Kastamonu</td>
<td>29</td>
</tr>
<tr>
<td>4.1. Comparison of National and Global Framework on Seed Governance</td>
<td>119</td>
</tr>
<tr>
<td>5.1. Traditional wheat variety harvest in Ihsangazi, Kastamonu</td>
<td>135</td>
</tr>
<tr>
<td>5.2. Bulgur from folk variety, Kose, marketed as “Gürün” bulgur in Sivas</td>
<td>156</td>
</tr>
<tr>
<td>5.3. Einkorn bulgur with local herbs served at a local food festival, Kastamonu</td>
<td>159</td>
</tr>
<tr>
<td>5.4. Information and financial networks between local farmers and interventions at multiple scales</td>
<td>164</td>
</tr>
<tr>
<td>6.1. A poster by TARSIM</td>
<td>194</td>
</tr>
<tr>
<td>6.2. A collage of credit card products for farmers</td>
<td>197</td>
</tr>
<tr>
<td>6.3. Cell phone company announces special package for farmers</td>
<td>199</td>
</tr>
</tbody>
</table>
List of Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AKP</td>
<td>Justice and Development Party</td>
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<td>ARIP</td>
<td>Agriculture Reform and Implementation Program</td>
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<tr>
<td>BBI-Matra</td>
<td>Programme International Natura Management Central and Eastern Europe</td>
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<td>BTC</td>
<td>Baku-Tbilisi-Ceyhan</td>
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<td>CATAK</td>
<td>Environmentally Based Agricultural Land Utilisation</td>
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<td>CBD</td>
<td>Convention on Biological Diversity</td>
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<td>CIP</td>
<td>Community Investment Programme</td>
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<td>DPT</td>
<td>State Planning Organization of Turkey</td>
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<td>EIP</td>
<td>Environmental Investment Programme</td>
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<td>EU</td>
<td>European Union</td>
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<td>FAO</td>
<td>Food and Agriculture Organization</td>
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<td>GATT</td>
<td>General Agreement on Trade and Tariffs</td>
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<td>GEF</td>
<td>Global Environmental Facility</td>
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<tr>
<td>GI</td>
<td>Geographical Indications</td>
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<tr>
<td>HYV</td>
<td>High Yielding Variety</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
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<tr>
<td>IFAD</td>
<td>International Fund for Agricultural Development</td>
</tr>
<tr>
<td>IPARD</td>
<td>Instrument for Pre-Accession Assistance Rural Development Programme</td>
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<tr>
<td>IPR</td>
<td>Intellectual Property Right</td>
</tr>
<tr>
<td>ITPGRFA</td>
<td>International Treaty on Plant Genetic Resources for Food and Agriculture</td>
</tr>
<tr>
<td>MARA</td>
<td>Turkish Ministry of Agriculture and Rural Affairs</td>
</tr>
<tr>
<td>MoEF</td>
<td>Turkish Ministry of Environment and Forestry</td>
</tr>
<tr>
<td>MUSIAD</td>
<td>The Association of Independent Industrialists and Businessmen</td>
</tr>
<tr>
<td>NAFTA</td>
<td>North American Free Trade Agreement</td>
</tr>
<tr>
<td>NGO</td>
<td>Non Governmental Organizations</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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</tbody>
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PVP .......................................................... Plant Variety Protection
R&D .......................................................... Research and Development
SAP ........................................................... Structural Adjustment Program
SGP ........................................................... Small Grants Programme
SURKAL ...................................................... Sustainable Development Association
TRIPs .......................................................... Trade Related Intellectual Property Rights
TUBITAK ...................................................... The Scientific and Technological Research Council of Turkey
TUSIAD ........................................................ The Association of Turkish Industrialists and Businessmen
UN ............................................................. United Nations
UNDP .......................................................... United Nations Development Program
UPOV .......................................................... International Union for the Protection of New Varieties of Plants
VRSCC ........................................................ Variety Registration and Seed Certification Center of Turkey
WTO ........................................................... World Trade Organization
Chapter 1: Situating Agricultural Restructuring: The Politics of
Development and Conservation

Everything grows from agriculture. Look after agriculture and economic and industrial growth will take care of themselves (Kenya Republic 1983:84)

Turkey is the last peasant bastion on Europe and the Middle East region. What kind of transformation, what kind of upheaval is in store for Turkey in the twenty-first century? To what extent will Turkey be able to carry out this transformation on the basis of its own independent decision-making process and its own original solutions? (Oyan 2002:56)

1.1. Introduction: Situating Complexity of Agricultural Change within Development and Conservation

The United Nations (UN) has declared 2010 the International Year of Biodiversity. With this international recognition, the UN connected the preservation of biodiversity to a reduction in poverty, which was for the World Bank connected to agricultural growth (World Bank 2008). These two seemingly opposed ideas come together as they show the complexity of international organizations’ focus on agriculture, biodiversity, development and conservation. The global increase in food prices and food riots in the summer of 2007, as well as the wheat export ban in Russia in 2010, has sparked fears of global food shortage and debates on food sovereignty and food security. They also led to the metaphorization of the current moment, as “crisis” defining this period as an exceptionally crucial moment for intervention (See Silvey 2009). I analyze...
the complexity of these connections between agriculture, trade, development, biodiversity and conservation in the context of a contemporary agricultural restructuring in a developing country. I aim to improve our understanding of the interaction between the global neoliberal policy frameworks and local processes as neoliberalism is realized and transformed through the messiness of politics, lived experiences and actual geographies (Heynen et al 2007), and situate current changes in the light of their post/colonial reality.

International organizations have made agriculture especially relevant to discussions about neoliberalism. By placing agricultural policy under market neoliberalization in trade negotiations since 2001, the World Trade Organization (WTO) also highlights agriculture as “a fundamental instrument” to enhance overall economic growth, improve food security and conserve natural resources (Ingco and Nash 2004; Hollander 2007; Koning and Pintrup-Andersen 2007). Regional integration efforts from NAFTA to the European Union (EU), perceived as the institutional thrust of neoliberal globalization (Harvey 2005), also focus on agriculture. These works also emphasize the state’s role: the development of agriculture “requires the visible hand of the state” (World Bank 2008).

Agricultural biodiversity (agrobiodiversity) enables the tracing of these connections; agrobiodiversity is defined as the component of biodiversity that has undergone selection and modification by human civilization, and the part of biodiversity that nurtures people and is nurtured by people (Saxena et al. 2003). Agrobiodiversity conservation and development are connected to both the biological processes of plant growth, reproduction and other evolutionary mechanisms and to temporal and spatial changes in farmers’ cultivation of crop varieties based on social, economic and political
programs. At the national scale, programs such as agricultural modernization could be implemented by the state, and at the international scale, global environmental and economic governance prescribe certain provisions such as the incorporation of intellectual property rights into the WTO and agricultural restructuring programs by the World Bank.

The necessity to regulate, privatize or commodify environmental resources is a common theme in the neoliberal interventions of the state and international organizations. While many authors have critiqued the role of neoliberal globalization and capitalism in doing this, little attention has been paid to the specific ways in which actors such as international organization influence on-farm biodiversity management, the attempts of market mechanism to internalize the costs of biodiversity conservation, or the strategies that farmers use to maintain their own agency over the management of agrobiodiversity assets (See Lockie 2007). As the ecological outcomes for agrobiodiversity conservation and the social outcomes for farmers’ livelihoods are diverse, there is a gap in our understanding of how the commodification of nature intersects with development and conservation goals on the ground.

The dissertation’s overall goal is to discuss the ongoing agricultural changes in developing countries, following issues related to “the seeds”. The issues related to these changes are understood in state discourses and practices as simply matters of global integration to capitalist markets. I aim to understand how it is that specific political, economic, and discursive practices have merged in such a way that neoliberal development and conservation practices appear to be dominant both within and beyond the reach of global economic, political and environmental policy circles. Elaborating
what this means for the kinds of policies that both states and non-state actors formulate in development and conservation and with what consequences, I also question how the changes in agricultural landscapes are relevant to broader debates on development and the (neoliberal) state. Methodologically, I utilize the tools of a broadly conceived political ecology framework that enables a complementarity of a number of theoretical perspectives. These theoretical perspectives are situated within the traditions of Marxian state theory, postcolonialism, and analysis of power relations. In the chapters that follow, each one written as a stand-alone piece, I use different theoretical concepts to analyze the specific articulations of interests, projects and outcomes by various actors in different contexts that are constitutive of agrobiodiversity’s conservation and development in the neoliberal era. While the focus of my dissertation research is Turkey, I believe that the findings of my research have broader relevance for understanding the impacts of regional and global integration processes on the sustainability of development, conservation practices and food security for many developing countries.

1.2. Research Questions

The following research questions guide this dissertation:

1- In which ways does the contradictory interface between global neoliberal policy frameworks and local complexities imply the emergence of spaces within which the state and farmers can articulate policies of development and conservation?

2- What practices accompany the extension of market-oriented mechanisms as both conservation and development strategy? Which actors are involved in the creation/extension of such markets?
What are the effects of such practices on agrobiodiversity, access to natural resources and livelihood strategies?

I address the above questions by examining the current agricultural restructuring in Turkey since 2000, which demonstrates increasing links between agriculture, development, trade and conservation and the shifting role of the nation state. I examine these connections by situating them historically in Turkey’s development trajectory and reinterpreting secondary sources through new theoretical insights. Turkey in particular provides an important case as current agricultural policies lie at the intersection of liberalization, globalization and Europeanization while trying to serve double goals of development and conservation. These goals cause tensions, with implications for the agricultural development strategies chosen, the role of the state and the conservation practices formulated on the ground. By engaging with different aspects of development and conservation in each chapter, such as the state’s role, global governance, market-oriented conservation mechanisms and new subjectivities, I show what neoliberal development and conservation look like in practice.

Turkey is an upper middle income country (World Bank 2008) enjoying relatively high standards of living, but also suffers from prevalent economic crises, especially since 1980s. Thus, it implements structural adjustment programs (SAPs) of international lenders in return for loans. Although Turkey is very rich in terms of biological diversity, it does not actively advocate self-protection mechanisms in Conference of the Parties (COP) to the Convention on Biological Diversity (CBD) to conserve its biological diversity (See United Nations 2010). As a country that has been successful in agricultural
modernization and the Green Revolution, Turkey has agricultural expertise, has achieved goals of self-sufficiency in food sustenance, and it shares its experience in plant breeding with the Middle East and Central Asia by exporting agricultural produce, seeds and experts. However, as a latecomer in agricultural breeding (like many other developing countries), it requires the constant flow of expertise and capital from multinational corporations and the United States. The Turkish state has been the main actor in implementation of development and conservation programs. Yet, there has been constant intervention from international organizations, such as the World Bank and the European Union, in both development and conservation, both through funding and loans and also expertise transfer in specific programs and projects. It is this liminality of Turkey’s position that provides the context to examine the contingent assemblages between agriculture, development and conservation in the neoliberal era.


Current environmental conditions are merely a snapshot of complex change. Changing political and economic conditions alter the context of decision makers and set the terms for their use of natural resources, which requires a compelling and robust explanation of social and ecological processes, and attention to political economy (Robbins 2004). A political economy approach highlights a specific set of processes that are crucial in capital accumulation and ecological transformation (Bassett 1988). Attention to the political economy of agriculture, and its interaction with development and conservation, under neoliberalism can generate new insights about neoliberalism as a
geographical political economic practice (Mansfield 2004). I build on and contribute to three broad literatures. I use insights from neoliberalization of nature and conservation to highlight how social and cultural relationships are rooted in economic interactions amongst people and between people and non human objects and systems. Thus, I focus on everyday practices, experiences and thinking related to development and conservation to link these to political, social, cultural and economic circumstances in which they occur. Second, I engage with state theory and postcolonial theory to understand both changing dynamics of power relations under neoliberalism and in development. Third, I use a political ecology framework, which provides a broad framework of analysis through various tools and insights.

1.3.1. Neoliberalization of Nature and Conservation

The complexity of contemporary agricultural restructuring under neoliberalism is of interest to geographers who have elaborated many dimensions of agricultural change under neoliberalism. They have examined various aspects of these changes, including the emergence of new governance mechanisms, applications of biotechnology, and shifts in class structures, using different frameworks for analysis, such as political ecology and discourse analysis (See Brown and Getz 2008; Budds 2004; Guthman 2007; Higgins et al. 2008; McAfee 2003, 2004; Potter and Tilzey 2005; Roff 2008; Sugden 2009; Valdivia 2005; Wolford 2007). The range of current geographic scholarship on agriculture and its transformation under neoliberalism suggest that there is ample room to address the scope, effects, processes of agricultural transitions, and especially to analyze complex transformations of the state, people and nature under market relations.
Neoliberalism is simultaneously a social, environmental, and global project.

Socially, neoliberalism involves the renegotiation of the boundaries between the market, the state, and civil society in such that people’s lives are more embedded and governed by an economic logic. Environmentally, neoliberalism brings different aspects of biophysical reality into the economic realms, with profound implications for access to and use of resources. Geographically, the “invisible hand” of the markets are spatially expansive so that neoliberalism is implemented worldwide (Castree 2008a). However, neoliberalism is not a hegemonic monolithic political and economic program but rather produces spatio-temporally specific neoliberalizations (Larner 2003; Brenner and Theodore 2002; Peck and Tickell 2002). In particular, geographers have explored the process of how particular non-human entities become materially and discursively transformed in order to be sold on the market to realize value and the outcomes of commodifying nature. These works address the commodification of specific aspects of the natural environment such as minerals (Bridge 2000), wetlands (Robertson 2004, 2006), biodiversity (McAfee 1999; Prudham 2007), water (Bakker 2005), and fisheries (Mansfield 2004; St Martin 2005) and in different parts of the world, such as Bolivia (Perreault 2005) and England (Bakker 2003).

While addressing the impacts of neoliberal reforms and the distributional implications of the various forms of accumulation and dispossession through neoliberalization, critical geographers work to develop an analytical framework to systematically explore the process of neoliberalization, its contingent and diverse outcomes on the ground and the process of remaking nature-society relations (Glassman 2006; Heynen et al 2007; Mansfield 2007a). The literature on neoliberalism and nature is
crucial to understand agrobiodiversity changes as it explains how changes and outcomes are constituted by historically and geographically specific material conditions, discourses, power relations and social processes.

Extension of market mechanisms in nature, as in the case of current agricultural restructuring in Turkey, shows that conversion of nature into a commodity involves three different but interrelated moments of privatization, commercialization and commodification. Whereas privatization involves efforts to change ownership, commercialization covers efforts to introduce efficiency and standardize production and measurement, and, commodification defines efforts to construct a market and make products fungible (Castree 2003, Bakker, 2005; Robertson, 2007). The types of neoliberal reforms to be introduced are influenced by the biophysical properties of resources, together with social governance frameworks. I argue that these interrelated moments in commodification of seeds and crops in the Turkish context, such as the redefinition of ownership and access to plant resources indirectly through the new Seed Law and commercialization through introduction of new standards by the restructuring of Grains Board, demonstrate the scope of changes in terms of access to and distribution of crop resources. I also aim to show how commodification of agrobiodiversity is not just a passive stage on which neoliberal policies unfold but a source of “friction” (Tsing, 2005), which suggests that neoliberalism does not translate into local contexts without a process of engagement and reminds us the particularities of neoliberalization of nature.

Neoliberalism also transforms conservation thinking and practices with its suggestion that nature is best protected through investment and consumption (Hartwick and Peet 2003; Brown 2002; Lockie and Carpenter 2010). Known by various names,
neoliberal conservation promises to link development and preservation of nature through “sustainable” use by the people (See Brown 2002; Goldman 2001; McAfee 1999; Igoe and Brockington 2007). The shift to sustainability in defining goals of conservation has been prominent in the incorporation of agriculture and use of biodiversity into conservation programs since late 1980s and early 1990s (Zimmerer 2006b; Hayden 2003). However, these market-oriented mechanisms for agrobiodiversity use are complex. I argue that markets for agrobiodiversity are the result of multiple development and conservation interventions by the state or international organizations, which do not guarantee sustainability of agrobiodiversity. I demonstrate that the effects of market mechanism are contingent as not all farmers have access to these markets and farmers articulate their decisions with the interests and outcomes of such market-oriented interventions.

Neoliberalism also requires eco-rational subjects to accompany development and conservation practices. The enclosure of remaining common resources through withdrawal of state maintenance of resources and reliance on market solutions to address environmental problems simultaneously disciplines resource users into neoliberal subject positions (Castree et al 2009). Geographers have elaborated the contradictory production of environmental subjects by engaging with governmentality and governance studies (McCarthy and Prudham 2004; Heynen et al 2007). I argue that new eco-rational subjects are expected to take both economic and ecological roles, of which the former is addressed more by the state or international organizations. I also argue that neoliberal conservation creates new exclusion mechanisms as it does not address systemic inequities in terms of
environmental access (McAfee 1999) and the state is not willing to share its control over agrobiodiversity resources.

1.3.2. The State, Development Geographies and Postcolonial Theory

Neoliberalism can live neither with nor without the state, which plays an active role in creating and facilitating the “inevitable” market forces that neoliberal proponents champion in the first place (see Peck 2008; Mansfield, 2004). States fill various roles from enforcing property rights to valuation of nature and setting prices (Mansfield 2007a; Robertson 2007) and continue to be the mainstay of conservation. This continuity in state’s role is also evident in the proliferation of state-sponsored protected areas on a global scale in the past twenty years of neoliberal ascendancy (Igoe and Brockington 2007).

The state’s role had shifted historically in the constitution of neoliberalism, including both deregulation and reregulation (Peck and Tickell 2002). Studies show that reregulation, the assertion of state involvement after deregulation, is more evident than deregulation in diverse cases, and deregulation and reregulation, are not simply transitions from one policy regime to another but involve articulation of state-oriented and market-oriented regimes simultaneously (Peluso 2007; Mansfield 2007b). The attention to discursive dimensions of such articulations reveals the technologies of and ideological support for neoliberalism during its expansion. It also highlights the power asymmetries in the geoeconomic and geopolitical system, which I question in the framework of political ecology, to challenge the assumptions about implementation of
neoliberal development policies as coercion from neoliberal-minded international organizations.

Development often associated with progress and economic growth refers to a complex set of social, economic, political, cultural and institutional transformations with both positive and negative connotations (Bebbington 2002; Peet 2009). Cowen and Shenton (1996)’s distinction between development as an immanent and unintentional process and development as an intentional activity is particularly relevant for this dissertation. Whereas development as an immanent process refers to processes of structural, political economic change, such as the expansion of capitalism, development as an activity refers to intentional and organized intervention with specified objectives, such as the agenda of international aid, public and other agencies implementing development projects and policies with specific ends (Bebbington 2002, 2004). The intervention dynamic inherent in development is contained within capitalism as the unleashing of markets for labor, land and money generates countertendencies in the sense that the conditions for global capital accumulation must be actively created and constantly reworked (Hart 2001,2010). I aim to analyze how these opposing tendencies play out in Turkey’s neoliberalization.

To understand the current conjuncture of development in Turkey today, I connect insights from postcolonial theory, Marxian state theory and question power relations. Postcolonial theory provides important insights to understand particular obsession with the Western and capitalist projects of development. Through concepts such as mimicry and hybridities, postcolonial theory also accounts for historically and geographically diverse and specific state formations, lack of resistance to neoliberal free-market ideology
in many developing states and the hybrid implementation of neoliberalism. Reading Turkey’s current global or regional integration to markets in its postcolonial reality reveals development discourses embedded in contemporary agricultural restructuring policies.

The attention to development as intervention and the postcolonial lens also improve our understanding of the connections between agriculture and development. From the lens of postcolonial approaches to development, the agricultural sector is absolutely central to the development of a “modern” nation state as the symptoms of “underdevelopment” are revealed clearly through the agriculture sector. The nation-state is pronounced to suffer from underdevelopment “if a high proportion of the net domestic product is dependent on agriculture and if a large proportion of its labor force is employed on farms” (Gupta 1998: 40). Similar representations and definitions of agriculture also exist in contemporary development narratives of international organizations (See World Bank 1982) which justify interventions of the state or international organization into the agricultural sector to ensure capitalist economic growth and to become part of the global markets.

To understand the power of development, Wainwright (2008) calls into question the very underlying categories arguing that capitalism qua development has become hegemonic because the practices through which it has been constituted are historically and spatially contingent. I do not approach development as merely a series of interventions, a tactic to maintain the dominance of particular classes or to establish the hegemony of international institutions. Rather, I read development interventions in their historical and spatial specificity to understand the hybrid neoliberal development schemes
in practice as an articulation of the global development framework with local complexities, needs and desires, which makes us take the state’s desire to develop more seriously (See Wainwright 2008; Li 2007).

Whereas the insights from postcolonial theory highlights the continuity of development interventions from modernization to neoliberalization, the variegations of neoliberalisms demonstrate the specific articulations by individual developing states in neoliberalization. By bringing insights from Marxian state theory, I approach the state as a complex, shifting and contingent assemblage of institutions, actors, policies and laws (Jessop 2007; Peluso 2007). I highlight the economic and social struggles within the state underlying development agendas, and how the outcomes of these struggles emerge as contradictory assumptions and processes that drive neoliberalization as a state project.

1.3.3. Political Ecology

Neoliberalism operates through multiple scales, actors and institutions, many of which are invisible in standard accounts (Nagar et al. 2002). Political ecology studies often describe how economic and political processes and networks operating at multiple scales interact to produce ecological outcomes at particular places (Rangan and Kull, 2009; 30). These cross-scale linkages are not merely “chains of explanation” as local and global are always in dynamic interaction and global flows are embedded in local processes (Paulson, Gezon and Watts 2005). Thus, scale as a methodological device allows tracing connections among people and places, processes and outcomes.
For political ecologists, scalar analysis requires attention to specific challenges, such as the identification of the most appropriate scale to start analysis and to weave through different scales. I start with analysis at the national scale and examine the state’s power and agency in the implementation of neoliberal policies. I then weave through the global and local scales to question the state’s ability to reframe development or conservation policies beyond the global neoliberal framework and question the influence of international organizations on the agricultural development policies. I also recognize the need to find a balanced integration of ecological and social processes to analyze landscape and socio-spatial outcomes as there is mismatch between the scales of biophysical and social processes (Rangan and Kull 2009; Zimmerer and Bassett 2003). Although the research on neoliberalization and nature does not resolve these issues, current geographic scholarship pays close attention to biophysical and institutional differences and shows that even “common” translocal policies of a neoliberal kind are shown not to operate in the same way (Castree 2008b).

Power relations are at the heart of a political ecology framework, which is crucial to understand networked relations between and within scales (Neumann 2009; Tan-Mullins 2007). I approach power relations as actively constituted in space and time (Foucault 1977; Deleuze 1988) to question both the state-centered versions of power, that represent the state as a unitary and singular actor, and the power asymmetries in the global economic system. This approach challenges linear relationships of power shifting between scales of activity from the supranational to the national down through to the local, where each scale appears unified and ordered (Allen 2003). I approach power as a series of complex and diverse techniques that show up as an effect on actions instead of a
direct constraint and analyze the effect neoliberal policies have on the opportunities various actors have to maneuver their actions. Thus, I assess how the contradictory interface between global neoliberal policy frameworks and local level complexities create spaces that allow the state and the farmers to articulate specific interests, projects and outcomes in development and conservation. This approach allows both recognition of multiple and contradictory aspects of neoliberal spaces, techniques and subjects, and depiction of neoliberalisation of nature’s outcomes not only in negative terms (Castree 2008b). Together with insights from postcolonial theory, this recognition of agency and the questioning of power relations challenge assumptions about the state as a passive agent and farmers as victims in neoliberalization.

Much of work in political ecology aims to determine whether the material condition of the environment, such as soil conditions, or its imaginary status, such as concerns about nature, have deteriorated (Robbins 2004). However, current research suggests that the scope for researchers and policy makers which enframe outcomes of change as disruption to places rather than an integral part of human processes of regional transformation and differentiation produces tragic narratives about the ecological politics of places (Kull and Rangan 2008; Rangan and Kull 2009; Robbins 2004). Geographical scholarship has demonstrated mixed socioeconomic and environmental outcomes of nature’s neoliberalization (see Bakker 2003, 2005; Bury 2004, 2005; Castree 2008b; Robbins 2004; Robertson 2004), which suggests that scope of political ecology is “not just a matter of vision that sees success or failure, good or bad agents, or even combinations of good and bad outcomes of ecological and social change” (Rangan and Kull 2009:42). Instead political ecology findings show the convergence of environmental
variability, spatial variations in resilience, political conditions, and economic development indicators might produce differentiated regional landscapes of social identities, sensibilities and power (Blaikie and Brookfield 1987).

The awareness of enframing outcomes of ecological change is also crucial when studying agrobiodiversity. Measuring biodiversity and its loss on the ground is a difficult and time consuming exercise, which requires careful sampling of the landscape to establish representative set of plots and observation over many years (Robbins 2004). Moreover, agrobiodiversity is the outcome of years of human-nature interaction showing how environments and people are mutually produced, which leads to complex strengths and vulnerabilities. Thus, I do not approach current ecological changes related to seeds in Turkey as genetic erosion. I question what is “natural” in agrobiodiversity as an attempt to transcend human-nature and as such do not want to assume what is natural and what is not, what is of conservation value and what is not, what needs to be controlled and what cannot (Robbins 2004).

In discussion of agrobiodiversity, the distinctions among folk variety, traditional variety and landrace (see Berg 2009) produce different reactions in policy makers, researchers, and conservationists. My interview findings suggest that a landrace that survived thousands of years under human cultivation and is genetically very close to a wild plant variety has conservation value. Yet, a folk variety that is the outcome of human cultivation and scientific improvement deserves no conservation value for development or agriculture experts although it is crucial for both livelihoods and sustainable development. This dilemma, the lack of equivalency of ecological and socio-economic values from a conservation point, is striking. The differentiation between the
cultivated and the wild forms of plants forms a “gap”, a conceptual space into which powerful universal demarcations do not travel well due to reciprocal ecological interactions between humans, their variable practices, and nature (Tsing 2005). A similar gap exists between subsistence and market economies, as agricultural policies and global frameworks favor modern varieties for their contribution to agricultural modernization and economic growth but discourage traditional varieties. Locals’ perception and language of these gaps is juxtaposed to those of outsiders, and only through “friction” in communication that these gaps are changed (Tsing 2005).

A similar sensitivity applies to the development process, understood as structural change (Cowen and Shenton, 1996). Even if development is supposed to imply improvement, progress, and expansion, Bebbington (2002) argues that many geographers have focused on development as exclusion, marginalization and disempowerment. By highlighting continuities and shifts in the state’s role in development and conservation in Turkey, I analyze current development interventions as historical and geographical contingencies. In this sense, I aim to disrupt the current narratives about neoliberal development as crisis, by illuminating the intersections between global frameworks and local complexities, and the existence of certain room to maneuver in which the states and the farmers can reinforce their agency.

1.4. Contributions of the Dissertation

In this dissertation, I critically engage with the practices and discourses of international organizations and those of the state in development and conservation to elaborate the emergence of spaces at the contact zones between global neoliberal
framework and local historical, political, economic and cultural complexities. It is at these contact zones that the state and farmers can assert their agency and rework definitions of development and conservation. In general, I make three broad contributions to literatures in neoliberalization and nature, development geographies and Turkey.

First, I examine the current moment of agricultural restructuring as a snapshot in the long-history of development geographies and expansion of capitalism. Agriculture in Turkey has come to assume a political gravity at a moment when its weight in the economy is waning (see Kautsky ([1899]1988) due to regional and global integration. The extent of agricultural change has taken global dimensions, from the World Trade Organization’s insistence on intellectual property rights on plants to the European Union’s focus on agriculture as an item of accession negotiations. By elaborating the politics of agricultural restructuring in Turkey evolving since 2000 in a historical context, I argue that there exists room for maneuver by the Turkish state in terms of reworking of its development agenda with the global framework. I also argue for farmers’ agency through their variegated responses to and articulation of market-based mechanisms in development and conservation. By framing the effects of neoliberalization on state, nature, and livelihoods beyond a disruptive change, I aim to disrupt the global crisis narrative about the effects of neoliberal economic and political policies.

Second, I analyze the complexity and contingencies in the neoliberalization of nature, through seed regulations, responses of farmers to market mechanisms and neoliberal subjectivities in conservation. I argue that physical environment is not just a passive stage on which neoliberal policies unfold but nature becomes a source of “friction” (Tsing 2005) during neoliberalization. I demonstrate how the human/nature
divide creates new categories to be defined and controlled by neoliberal regimes and schemes, such as the need to have specific regulations for governance of seeds, and the need to separate “genetic resources” from “traditional varieties” or “farm-saved varieties”. The complexity of human/nature interaction in agrobiodiversity also creates contradictory outcomes under markets, especially in assessing values for conservation and markets. Friction becomes crucial for understanding the overlapping and contradictory seed governance mechanisms implemented through various international organizations to extend neoliberal policies and schemes. Such mechanisms indeed create spaces and opportunities for individual states to rethink development priorities, such as the creation of *sui generis* seed systems.

Third, through a blend of methods, I add new theoretical and empirical insights about Turkey’s contemporary agricultural restructuring and accompanying social and ecological changes, particularly the 2006 Seed Law and the World Bank funded Agriculture Reform and Implementation Program (ARIP) completed in 2008. The ethnographic work lends a methodological emphasis to connect the local, national and global in the study of the concrete changes. By highlighting the everyday practices of neoliberalization through the state’s development policies and farmers’ responses to development and conservation, I show how different meanings of neoliberalism are produced, new subject positions are negotiated, and resistance and complicity are played out. By reinterpreting previous academic scholarship on Turkey through a conceptual framework of postcolonialism, Marxian state theory, and a focus on power relations, as well as reading official archives in line with this ethnographic work, I aim to highlight the embedded discourses of development in Turkey’s development trajectory from
modernization to neoliberalization, from globalization to Europeanization. I argue that situating Turkey’s state projects of development in their post/colonial reality can illuminate current development policies.

1.5. Research Strategies, Research Sites and Methods

The arguments in this dissertation are grounded in empirical research that I conducted in Turkey during a total of eight months over Fall 2007, Summer 2009 and Summer 2010. I constructed my research tracing the circulation of a manifestly material subject through different contexts. I follow the “seed”, the basic input of agricultural production developed through a very peculiar human/nature interaction. This mode of constructing the multi-sited space of research fits with the study of processes in the capitalist world system (See Marcus [1995] 1998; Mintz 1985). My goal is to understand how contradictions, tensions and silences about management of and access to seeds are being produced in practice at multiple scales, from supranational scale to the national to the local in various locations through different actors.

I acknowledge my distance from the traditional anthropological approach to ethnography, which can be characterized as a focus on a single or very small number of cases to better understand processes and meanings, thick description of lived unique experience and immersion in one local for two years or more (see Denscombe 2007; Berg 2007; Scheper-Hughes 2004). My research approach is a critical ethnography, a current line of which is “global ethnography”, a means for “advancing from the abstract to the concrete” in order to analyze confusions and silences in terms of natural resource use at the present conjuncture (Burawoy 2000; Hart 2004, 2010; Tsing 2005). This requires
attention to location, simultaneously localized and global, to lived experiences and to (un)intentions as opposed to simply action (see Wolford 2006). Tsing’s analysis of globalization as an interconnected but heterogeneous set of projects highlights the concreteness of movements, and the remaking of geographies and scales. As capitalism, science and politics are especially depended upon global connection as processes, then none of these processes nor the universal claims on which they are based make places and things similar. I approach current agricultural restructuring as “friction”, which provides an opportunity to analyze both variegated neoliberalisms and divergent attitudes of actors at different scales.

I also seek to assist in problem solving, expand knowledge and enhance competencies of the respective actors (Kelly 1999). Thus, I started with action research, in which research and action are integrated in a cyclical process from the design phase (Denscombe 2007). Although I had a general framework of methods and strategies when I visited Turkish state officials in 2007, I was ready to modify my study sites or activities in line with their urgent policy needs that require empirical data. State officials, in general, were helpful to provide the official accounts and their personal opinions. Whereas the inputs of one senior state official were crucial in the choice of research sites, Kastamonu and Sivas (see the following section), they were not adequate for integration of action research strategy.

As I wanted my immediate feedback to be put into use by practitioners, I organized a workshop with local stakeholders with the support of the district governor in Ihsangazi, Kastamonu in 2009. The workshop which started with my presentation of interim research findings, was the first time the stakeholders came together in the last
three years. The tensions and lack of communication among stakeholders, which became evident during interviews, has prevented them from taking action for the development and conservation of the traditional wheat variety, cultivated einkorn (*Triticum monococcum*). The outcome was the preparation of an Action Plan for the conservation of einkorn. The stakeholders prioritized actions to be taken, such as Geographical Indication certification for einkorn products, the organization of annual einkorn festival, land surveys to determine the total area under einkorn cultivation, and application for production certification for cracked wheat from einkorn, and shared responsibility for actions. I also used multiple research methods to analyze current processes of agricultural, ecological, economic and social change.

### 1.5.1. Research Sites

During my preliminary fieldwork in 2007, I visited state officials in the capital city\(^1\) of Ankara and visited state’s offices of agriculture research in two provinces, Eskisehir and Izmir (Figure 1.1: Map of Turkey and the research provinces). I collected

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\(^1\) In terms of administrative structure, Turkey is divided into 81 provinces, territorially defined units with a state-appointed governor, and 923 districts, that are the primary administrative division under provinces with state-appointed sub-governors. Provinces are made of several districts and are named after the largest (center) district. It is a centralized structure in terms of decision-making. In this nested hierarchy, national official decisions flow from the province to district to villages, which are smallest territorial administrative unit that cover rural areas with less than 2000 people and administered by a locally-appointed village headman. Village headmen are responsible to sub-governors at the district level, who represents the state at this scale. The administrative structure is integrated with the civil administrative structure, based on a functional division. The top autonomous unit, the city, is administered by a metropolitan municipality mayor or a mayor (depending on its size), a town is administered by a mayor and neighborhoods are administered by headmen. All of these administrators at the city, town and neighborhood units are locally-elected autonomous individuals. The decisions of each municipality or neighborhood are autonomous from each other, each town has its separate garbage collection or landscaping facilities and cater these services to neighborhoods. The city provides mass transportation services through towns that make up the city. In general, the administrative structure overlaps with the civil administrative structure at the province/city scale. Ankara, the capital city, is also a province (See Özçağlar 2004; Sözözen Kahraman 2005).
my empirical data about the state’s articulation of development policies through interviews with state officials, representatives of international organizations and academicians in their offices in Ankara. I also carried out archival work in Ankara. I carried out my ethnographic work in the villages of three districts of two provinces, Kastamonu, a province in northwestern transitional zone, and Sivas, a province in central Anatolia, to analyze responses to neoliberalization on the ground. I travelled extensively to villages for eight weeks. (Figure 1.2: Map showing the research districts and villages). I analyzed the data in my office and home in Columbus Ohio. To ground the effects of agricultural restructuring, I chose villages in different geographical regions of Turkey with different social, economic, ecological and political conditions, where different traditional wheat varieties are grown. Based on the suggestions of a senior official (Personal Communication, SO2, 2007, Ankara), I chose the research sites due to the market potential for the traditional varieties, the pattern of traditional variety cultivating farmers (e.g. aging population, migration of the young to the city) and the significance of the these varieties for local and national food security. Semi-structured interviews with farmers, traders, farmer groups, nonprofits and other actors that were crucial in the value chain of wheat traditional varieties in these two provinces were carried out in Summer 2009. Participant observation during the harvest season of 2009 in both Sivas and Kastamonu was accompanied by one focus group discussion with farmers at each site.
Figure 1.1. Map of Turkey with the research provinces

Research was conducted in three research sites: Ankara (capital city; office locations for international organizations and the state), Kastamonu, and Sivas (where wheat landraces are grown). During my preliminary research, I visited the Agricultural Research Institutes in Izmir (location of the national gene bank), Eskisehir, and Ankara. I also carried out interviews with state officials in Ankara.
There has been earlier research in both sites (i.e. unpublished and published academic research) which allows a temporal and spatial comparison in traditional variety cultivation and livelihood changes. These studies range from categorization of crop diversity and its geographical distribution (Gökgöl 1939; Zencirci and Kün 1996; TUBITAK 2003) to household scale analysis that analyze various factors that affect farmers’ management of agrobiodiversity (Meng 1997; Brush and Meng 1998; Brush 2004; Kruzich 2006; TUBITAK 2003; Karagoz 1996) and from market chain analysis.
(Guiliani et al 2009) to general trends in agrobiodiversity conservation in Turkey (Zencirci et al 1998).

Although it is common to use pseudonyms for research sites to protect one’s informants from intrusions by outsiders, such as tourists, I believe that disclosure of place names is necessary for locating the field site precisely in geographical and historical context in order to provide accuracy and depth and also allow comparisons over time. The names of individuals in this dissertation however are all pseudonyms.

Sivas is a major commercial and semi-subsistence wheat growing city in central Turkey (Karagoz and Zencirci 2005). It has been connected to the markets since 1930s through major railroads (Özbek 2003). On the 1200 meters/3937 feet to 1800 meters/5905 feet above sea level range of Sivas, a bread wheat traditional variety *(Triticum aestivum)*, locally known as *Zeron*, is grown (Figure 1.3). Farmers have medium size land, above the national average of six hectares (about 14.5 acres) (European Commission 2010). As one of the highest quality traditional wheat varieties, it is still popular in Sivas and surrounding areas. The area sown is still large with respect to other traditional wheat varieties in Turkey, and *zeron* is known by other names and grown in northeast Turkey.

On the other hand, Kastamonu farmers grow hulled wheat varieties (cultivated emmer and einkorn) that are the semi-wild relatives of wheat, used mainly for animal feed and household consumption as bulgur, also known as “farro.” Cultivated einkorn *(Triticum monococcum)*, known as *gabilca* or *siyez* locally, is a semi-wild relative of wheat and among the most ancient cereal crops of the Mediterranean region (Brush 2004) (Figure 1.4). With the expansion of modern agriculture techniques and varieties, there
was a sharp decline in the area sown to hulled wheat between 1968 and 1993 (Karagoz 1996) and it production was pushed to the marginal and isolated pockets in Turkey’s northwest (TUBITAK 2003), mainly to the mountainous districts of Sinop and Kastamonu (Bioversity International 2006). Agroecological conditions affect hulled wheat cultivation in Kastamonu, as the sloping marginal areas are not suitable for field crop cultivation or successful cultivation of other crops (Karagoz 1996; Guiliani et al 2009). New niche markets for hulled wheat have emerged in recent years due to new research on its nutritional and health properties leading to a growing appreciation among niche consumers in urban areas (Bioversity International 2006).

Because socio-economic development categorizations through official statistics are critical for the state’s economic development investment decisions, I situate the research sites in comparison to each other. A majority of employment in both of these provinces is in agriculture and the per capita production level is lower than the national average (DPT, 2003a). Sivas shows a wider range of socio-economic development among its districts, ranging from low to medium development levels. However, Kastamonu has a great socio-economic gap between its center and peripheral districts (DPT 2004). Both Kastamonu and Sivas are defined as priority regions for regional development by the Turkish state (DPT 2003b). However, the Turkish state is not the only actor in regional development interventions. Both Kastamonu and Sivas receive funding from the European Commission for regional development. Indeed, the Turkish state has defined Kastamonu a priority region for development based on the new territorial division through EU statistical criteria.
Figure 1.3. Traditional wheat variety (*T. aestivum*), *zeron*, in Sivas (Reprinted with permission from BTC 2008).

Figure 1.4. Traditional wheat variety einkorn (*T. monococcum*) in Kastamonu, one month before harvest.
I carried out ethnographic work in three districts and their villages, Ihsangazi in Kastamonu, Gürün and Ulaş in Sivas. Whereas both Ihsangazi and Ulaş are categorized as less developed districts, with all of their socio-economic variables less than national averages, Gürün has medium development levels. Landscape affects settlement patterns in the villages visited. The villages of Ihsangazi, Kastamonu, are very dispersed to the extent that each kin group of five to fifteen households has a separate settlement, called neighborhoods, within the same village. Many villages had at least three neighborhoods. The settlements in Gürün and Ulaş, Sivas, are clustered in villages. In Ihsangazi, I visited twelve separate neighborhoods in six villages, whereas I visited a total of ten villages in Gürün and Ulaş.

The low levels of socio-economic development at the research sites compared to national averages confirm the literature that traditional wheat varieties in Turkey are maintained in relative isolation from markets (Meng and Brush 1998; Kruzich and Meng 2006). However, these indicators cannot explain current dynamics of market-oriented mechanisms in development and conservation. The farmers in both Kastamonu and Sivas have been fully integrated into the national economy and culture of Turkey. Although there were no specific large scale state-led agriculture development programs in Kastamonu and Sivas before 2005, almost all farmers had access to extension, credit, subsidized input supply and state commodity purchasing. Farmers in the research sites are familiar with high yielding varieties (HYVs), through both state’s extension facilities and their informal networks to agriculture chambers, private businesses, state-owned cooperatives and farmers in other regions.
1.5.2. Archival Work

My archival work started with an analysis of texts produced by the state (e.g. official documents, press releases, presentations) and international organizations (e.g. progress reports of EU, World Bank project reports in Turkey, World Development Reports). This analysis helps to illuminate the general framework of agricultural restructuring in Turkey and in other developing states and to understand the interaction between the global neoliberal policy frameworks and local processes in their post/colonial reality. The majority of the documents I used were available online. I received copies of official statements and conference proceedings in hard copies. I complemented this analysis by reinterpreting secondary sources on Turkey’s development.

I came across agricultural statistics, online and in the archives, which served both the administrative needs of the individual state departments or the international organizations that collected them and also the public to justify policy choices, and to measure the outcome of such policies (see Mitchell 2002). Some studies on the political economy of agriculture in Turkey circumvent some statistical puzzles related to simple and crucial agricultural data, such as land under cultivation of traditional wheat varieties or the precise number of agricultural workers and their income levels, raising concerns about the quality and reliability of statistics. Information may be confusing in certain areas that are important for the implementation of development and conservation policies, and most importantly, EU harmonization, which evaluates “progress” towards accession based on a number of statistical variables (see Saçlı 2009; Burrell and Oskam 2005). I do not use agricultural statistics in this dissertation and do not make claims in terms of
development or conservation outcomes. Rather, I argue that agricultural statistics are crucial to understand how both the Turkish state and international organizations from the World Bank to the EU use statistical calculations to create certain discourses about agriculture. Such discourses include definition of “crisis” in agriculture as a sector, how farmers maintain biodiversity, agriculture as a burden on the economy, and the need for a reduction in the agricultural workforce. These discourses are then used to justify the inevitability of global integration and prioritize development over conservation of agrobiodiversity in this dissertation. I complement the textual analysis with semi-structured interviews, participant observation and focus group discussions since the research is about current processes and documents often cannot address detailed processes and relations among multiple actors (Kim 2006).

1.5.3. Semi-structured Interviews and Participant Observation

Semi-structured interviews ensure flexibility in the way issues are addressed by the informant (Dunn, 2005). They provide some degree of predetermined order, but allow the participants to explore the topics in their own ways (Bigman 2001). I conducted 101 semi-structured, in person, interviews with state officials, international organization representatives, farmers, farmer representatives, environmental activists, development and conservation non-profit groups, academicians, businessmen and traders (see Appendix A). I conducted all interviews in Turkish. I recorded the majority of interviews with state officials and representatives of international organizations, which I then transcribed. I took notes during my ethnographic work in villages. During my interviews in state offices and in rural areas, I used snowball sampling, where the people I
interviewed led me to new contacts. In rural areas, I mainly used availability and random sampling. I started with key informants, senior people who were experienced and had direct or expert knowledge in agricultural, development or conservation policies of Turkey or development and conservation of agrobiodiversity.

My interviews with non-farmers were often guided by previous ones, following a broadly defined grounded theory approach (Glaser and Strauss 1967; Denscombe 2007), where I used empirical field research as the starting point and developed the analysis with constant reference to fieldwork data. In addition to some questions I always tried to ask everyone, such as their timeline of agricultural restructuring in relation to international organizations and perception of biodiversity, I would also investigate a problem that would arise in earlier interviews. My interviews with farmers were based on a common question template I used in each village (see Appendix B).

My research also consisted of participant observation. I attended two workshops by non-profit groups in 2007 and 2009, and did continuous email participant observation throughout the period from November 2007 to September 2010 of two national non-profit organizations working on a national seed network. I participated in two local festivals, one of which was named after the traditional wheat variety. During both of these festivals, local food with the wheat variety was served and cooking contests were organized, besides entertainment activities. I also sat in coffee houses, visited animal markets, the open food markets and the fields to engage in discussions about everyday practices and to observe the relations and communications of farmers with other stakeholders (e.g. trader, mill owner, seed company representative).
1.5.4. Focus Group Discussions

I carried out two focus group discussions with a total of eleven farmers in Kastamonu and Sivas. Whereas interviews depict informants’ views of life (Dunn 2005), focus group discussions reveal the synergy and spontaneity that arise from the social context which can generate further insights for both the participants and the researcher (Cameron 2005). They help to analyze multiple meanings that people attribute to relationships, processes or places and show how they are expressed and negotiated (Finch and Lewis 2003), particularly the contemporary discourses and politics, as narratives emerge in a social context through conversation with others (see Harris forthcoming). Some of the themes or narrative threads across the focus group transcripts helped to understand the connotations and meanings that the state, development and conservation hold in these contexts.

1.6. Where is Home? Where is the Field? Notes on the Researcher

The question of positionality requires attention to how my being Turkish impacted the research and results. I believe it had an effect, but as I started the research I thought these effects would be very minimal. My identity as a Turkish-American carrying out fieldwork in Turkey posed some dilemmas for me. From the perspective of a traditional fieldwork, I was going to the “field” but at the same time returning “home” (see Sultana 2007). Yet, my stays at my parents’ home in Ankara during fieldwork was so hectic that made my mom suggest that I was “not at home”. In 2009, I lived in rural areas of Kastamonu and Sivas for two months, with my American husband and our baby daughter. Although I became more aware of my educational privilege through material
and symbolic differences in rural areas, I did not feel as an outsider or that people “other”ed me. I am an urbanite who was born and grew up in the province, but my parents were first-generation urban dwellers and we always had connections to their village. I would spend my summers in my grandparents’ fields, in which cotton, watermelons, wheat or vegetables were grown for household use. Later I worked in rural areas with farmers through my professional experience at a government agency and a non-profit organization working on development and conservation projects. The relationship, then, was based on a common understanding of exchange, that in return for her cooperation, the farmer could become part of a development project. However, there was still trust and openness between me and rural people. As I worked previously in rural areas where multiple development projects were implemented, I was concerned that rural people would be tired of seeing and talking to researchers, answering questions and spending time with strangers in total boredom. However, as it turned out, my research sites were relatively “virgin” areas, that have received limited, if any, large scale state or international institution development intervention until the second half of the 2000s.

People were by and large welcoming and willing to talk freely. At the local government level, my identity made me uncomfortable as “the interest of a researcher from America on the traditional variety” made us the honored guests in one research site. We attended local festivals in the first row, sitting next to the sub-governor, and we were offered local food with other local officials in a semi-official gathering. I appreciated the hospitality and generosity shown towards a guest and researcher. Living in the district also ensured daily encounters with local people. I met with local shop owners who saluted me as “professor” on my way to the restaurant where we had dinners every day.
Although I made it clear that I was not yet a professor, the respect shown was
tremendous. I felt obliged to act like a professor through everyday acts, how I ate, how I
addressed people and how I walked on the streets. I was perceived as one of that group of
people, mainly foreigners, who have come to “learn” about their traditional variety but
the expectation was also that this would perhaps create indirectly more income
opportunities.

Sivas was much larger with more connections to “outside”. Almost every village
has sent immigrants to Europe, mainly Germany, but also Netherlands and France. Thus,
when we arrived in August, the streets were booming with all kinds of expensive new
cars with European plate numbers, second or third generation Euro-Turks, who were born
abroad and only lived in Turkey during summer vacations. As the distinction between
insider and outsider was more blurred in Gürün, Sivas, everybody blended in but
everybody was also a “yabancı” (not-from-here). Although I did not receive the level of
enthusiasm as I did in the first research site, all state officials were very helpful, and all
the people in villages shared their tea, food and knowledge with me. The important thing
for me than was to be as faithful as possible to the relations in that space and time
(Sultana 2007).

My husband’s presence did not present any conflicts with my identity or work.
People were proud of him as he was able to speak Turkish. However, especially at local
offices, the change in gender roles that he was taking care of our daughter while I was
going out to do interviews created some curiosity. I did not feel my gender was a problem
as everybody equally addressed me. Only on a few occasions where we were out with my
husband at local offices that he would be addressed constantly to answer research related questions.

I believe I felt more uncomfortable during my encounters with state officials at the national scale. In some occasions, these encounters involved power negotiations that I acknowledge my role as a researcher and them as the experts. After one these encounters, I ended up questioning for three days why I am doing this research, why I am a geographer and why I am doing the research in Turkey. I believe much of this unease stems from the power associated with the official position within the centralized hierarchical structure but also the border between researchers and policy makers, and the concerns that researchers would criticize what policy makers do. In this dissertation, as I also stated earlier, my goal is to provide empirical and theoretical insights on the current moment of changes that can guide policy makers or future researchers.

1.7. Summary and Plan of the Dissertation

In Chapter 2, I introduce the conceptual framework that helps to analyze Turkey’s contemporary agricultural restructuring. I weave insights from postcolonialism, Marxian state theory and Foucauldian conception of power to highlight the shift and continuity in the state’s role in development and the expansion of neoliberalism in the developing world. These highlight that the state is not a monolithic institution but is historically specific and diverse. Postcolonial theory’s insights on development as mimicry help us understand certain development trajectories in the developing world, towards global integration with the Western markets. However, in order to understand overt shifts from the development trajectories of Western countries that are currently in practice in
developing states, I interrogate power asymmetries in the geoeconomic system within and beyond the state. I argue that the expansion of neoliberalism is not simply imposition from the West but developing states have room to negotiate neoliberal development. Yet, developing states are not totally free agents within the geoeconomic and geopolitical system either. A neoliberalization-oriented state project can become hegemonic and unite the interests of different groups within the state to pursue neoliberal development agendas.

In Chapter 3, I examine current transformations through European Union accession in connection to neoliberal globalization, and the transformation of EU accession into a hegemonic state project in Turkey’s development agenda, by situating these in Turkey’s historical development trajectory. By doing so, I can examine the role of international organizations in Turkey’s agricultural transformation, and the shift in development goals from self-sufficiency to market-integration. I argue that the current World Bank funded project, Agricultural Reform Implementation Program (ARIP); reveals the power struggles within the state and the state’s character as an ensemble of institutions. It also shows the strong role of the Turkish state from the beginning. By interrogating the interaction of World Bank officials with Turkish state officials, I also aim to show the resistance and complicity of the ruling elite with the global neoliberal framework. By bringing insights from postcolonial theory, Marxian state theory and power relations, I reinterpret previous scholarship about Turkey’s development in agriculture to analyze Turkey’s modernization desire in line with its postcolonial reality. I argue that elaboration of the constant large-scale transformations in Turkish agriculture
has repercussions for whether the current moment is the “crisis” for Turkish development and the state.

Chapter 4 is an article co-authored with my advisor Becky Mansfield and submitted for publication. It examines the consolidation of seed governance in Turkey through the Seed Law that passed in 2006. We analyze the tensions and ambiguities in seed governance that arise at the intersection of Turkey’s goals of development and diverse priorities imposed by international frameworks. We approach seed governance as a dispositif, the product of an open-ended process of strategic elaboration among constituencies involved in trade, agriculture, development, and conservation. Thus, contradictions among multiple international regulations present an array of choices for developing countries. However, despite the general agreement that national seed regulatory systems should reflect the economic, political and technological situation at the local scale, many developing countries, including Turkey, are implementing similar seed governance mechanisms. This convergence of laws that favor commercialization and privatization results not simply from imposition of regulation from above, but instead reflects that developing countries adopt dominant global perspectives on the “modern” seed and agricultural progress. Besides providing a multi-scalar analysis of seed governance mechanisms, this chapter also deals with power asymmetries embedded in the geoeconomic and geopolitical system.

In Chapter 5, I elaborate farmers’ responses to market mechanisms as a conservation and development strategy through ethnographic study in Kastamonu and Sivas. The responses of farmers are variegated, not only between different locations but also within the same location. By highlighting farmers’ responses that led to revival or
abandonment of traditional varieties, I argue that markets are crucial for conservation and development of traditional wheat varieties. Yet, market mechanisms are not entirely based on individual actions as they require a “visible” hand of an international organization, the state or external funding agency to flourish. The existence of markets alone does not guarantee conservation outcomes. I argue that farmers engage in new alliances with various non-state organizations on conservation and development of traditional wheat varieties, to benefit from new opportunities of markets. Thus, the extension of market-mechanisms produces agrobiodiversity conservation in certain locations through the specific articulation of in interests, projects and outcomes, which requires attention to how household choices are structured by market integration, public policy and political economy.

In Chapter 6, I examine the emergence of new subjectivities under neoliberalism leading to conservation outcomes. By combining subjectivities, state and participation, I aim to see farmers’ agency vis-à-vis conservation under neoliberalism in a new light. I demonstrate how the Turkish state emphasizes new subjectivities for farmers as eco-rational subjects. I argue that while emphasizing mainly the eco-nomic roles for farmers as an entrepreneur or as a consumer, the state’s hesitance to share its control on natural resources limits the emergence of eco-logical subjectivities, like farmers as conservationists. Similarly, I also show that although farmers internalize some of these subjectivities they have not been quick to adapt to especially eco-logical subjectivities. I argue that together these different threads enables us to ask questions about Turkey’s contemporary conservation practices that were not possible before, such as what the
continuous emphasis of agrobiodiversity conservation in genebanks means for participatory conservation and access to natural resources.

In sum, by bringing new insights and looking through a complex and contingent moment of change in contemporary Turkey, I aim to disrupt the “crisis” narrative about agriculture, nature and humans. By following the “seed” and combining different aspects of its development and conservation, I argue that the agency of the state and humans in neoliberalization determine conservation and development outcomes in particular contexts. Although I question power asymmetries in the geopolitical and geoeconomic system, I also show that the articulation alone does not suggest alternative development or conservation practices. Neoliberalism can surface and become dominant through embedded discourses in development as in seed regulation, through hegemonic state projects as in European Union accession or through taking up new subjectivities.
Chapter 2: Development Geographies and the Neoliberal State:

Postcolonialism, State Theory and the Power of Neoliberalism

Agriculture ... offers great promise for growth, poverty reduction, and environmental services, but realizing this promise also requires the visible hand of the state—providing core public goods, improving the investment climate, regulating natural resource management, and securing desirable social outcomes ... The state will need greater capacity to coordinate across sectors and to form partnerships with private and civil society actors. Global actors need to deliver on a complex agenda of interrelated agreements and international public good. (World Bank 2008:2)

2.1. Introduction

This chapter engages with postcolonial theory, state theory and questions of power to analyze the changing dynamics of the state’s relationship to development under neoliberal schemes and regimes. I put a geographical lens on interventions by the state and international organizations, mainly international financial organizations, such as the World Bank and International Monetary Fund (IMF), in agriculture for development. The renewed interest of international organizations in agriculture for development aims to reverse years of policy neglect and remedy underinvestment and misinvestment in agriculture by donors and governments. However, current prescriptions on agriculture and development reinforce existing “dichotomies” between developed and less developed countries. These dichotomies resonate with earlier critiques raised by postdevelopmental and postcolonial literatures in the sense that these development prescriptions are only valid for “agriculture-based-countries,” located in Sub-Saharan
Africa, Asia and/or Latin America (World Bank 2008) in order to shape certain development models.

By combining different insights on state, development and neoliberalism, I aim to highlight the neoliberalization of development and agriculture policies and question various approaches to the extension of neoliberalism, such as the recolonization of the global South and the coercion of international organizations over developing states. I argue that neoliberal development involves reworking of global neoliberal structure with national development agendas through state projects, leading to redefinition and partial implementation of neoliberalism in developing country contexts. I also approach development as an ambitious project of the state, which has been redefined through years, and currently under neoliberalism. This redefinition and articulation of development policies highlight a discrepancy in the way neoliberal development is implemented that accounts for differences among neoliberal processes in space and time. While this confirms the literature’s findings that there exist variegated and diverse neoliberalizations, it also accounts for “agency” of the developing states in neoliberalization.

Geographers have documented that there exist several neoliberalizations rather than a unified universal entity (Larner 2003; Peck and Tickell 2002). Neoliberalization, the mobilization of neoliberal discourses and strategies in the local institutional contexts, requires paying attention to “messy actualities” on the ground as practices, implementation and effects of neoliberal development policies are hybrid from the onset (Larner 2000; Peck 2004). These suggest that neoliberalism is a process where generic similarities among different neoliberalisms are identified as yielding a “neoliberal model”
that nowhere exists as such (Castree 2008a). However, the worldwide expansion of neoliberalism in development and conservation raise questions about the “hegemony” of neoliberal market ideology and various explanations that involve technologies of power from seduction and desire of the developing countries to replicate Western development to the coercion of international financial organizations.

By drawing on multiple insights, geographers have developed several approaches to understand the expansion of neoliberal capitalist form of development and the interconnected power topographies that link North and South under free-market ideology. Postcolonial scholars interpret the emergence of free-markets discourse and its promotion by Western-led international financial organizations as a contemporary reformulation of colonial idioms in a postcolonial world (See Sidaway and Pryke 2000). Whereas others define contemporary development practices not as an imposition from the “core” to the “periphery” or from the “West” to the “East” but simply as the exercise of power in multiple, interconnected arenas inseparably linked with the socially and spatially uneven dynamics of capitalist development (Hart 2009). Yet, the nuances between different approaches require further analysis into how these approaches can be more productively fused into critical geographical scholarship on state and development, and the implications for neoliberalism and state.

I contribute to these discussions by illustrating productive intersections of postcolonial theory and state theory to situate development and statehood in a historical frame and highlighting the role of agriculture in the making of modern nation-states through postcolonial work. My starting point with postcolonial theory also highlights the persistence of populism of agriculture in development in neoliberalizations at particular
places and times. Yet, the strength of this dissertation is combining various insights to analyze multiple dimensions of change. I also question power relations, which helps to clarify the role of the state in neoliberalization, both the power shifts between international organizations and the state and the power struggles within the state. Thus, I demonstrate that the state is not a monolithic institution but is historically and geographically specific and diverse. The insights of postcolonial theory and state theory are crucial to highlight the articulation of neoliberal economic and political policies between different actors engaged in the neoliberal project. These insights are especially relevant to analyze how the state engages with, negotiates, accommodates and reworks development processes (Hart 2001; 2002; 2010) in its encounters with international financial organizations.

2.2. Insights from Postcolonial Theory: Agricultural Modernization and Development Interventions

Postcolonial theory is instrumental in understanding past and present development projects that privilege the West/Europe and also capitalism. Although the term postcolonial has usually been used until recently to describe a condition to refer to peoples, states and societies that have been through a process of formal decolonization (Sidaway 2000), post-colonial is a new designation for critical discourses that thematize issues emerging from colonial relations and their aftermath, such as dependency in development and centre-periphery roles as well as contemporary relations of power that mark the global South (Harris 2008). In recent years, more geographers have incorporated postcolonial approaches to study human geography, including places that
were never formerly colonized (Nash 2002; Sharp and Briggs 2006; Radcliffe 2005; Mercer et al 2003; Harris 2008; Sidaway 2000). Especially in development research, postcolonial scholarship has produced work from postcolonial statehood to social different, by incorporating new conceptual frameworks for research, such as ambivalence and mimicry from the postcolonial thinker Homi Bhabha (Harris 2008; Radcliffe 2005). Despite increasing acceptance of postcolonial approaches in human geography, postcolonial and development studies remain disconnected² (Sylvester 1999, 2006; Radcliffe 2005). While some geographers have successfully linked postcolonial scholarship to development issues to highlight the complex, contradictory and ambivalent development geographies (Gupta 1998; Wainwright 2008; Harris 2008), critical engagement with postcolonial theory could still provide ample room to develop future research in development geographies (Radcliffe 2005).

Insights from postcolonial development are particularly relevant for this dissertation to trace continuities between colonialism and developmentalism. The colonial dichotomies that enabled the construction of a colonial power/knowledge, such as colonial institutions, practices and discourses, continue to operate in post/colonial reality in the contemporary world with some nuances (Gupta 1998). These dichotomies are also the basis of questions of representation and imagined geographies (Said 1978; Escobar 1995). By dividing the world into the axes of “modernity” and “tradition,” development interventions to achieve progress, high standards of living, rationality and

² The difficulty of integrating postcolonial and development studies has often been addressed as the source of this disconnect. Development studies is an applied field of social science, which aims to develop theory and practice that can assist “Third World” countries to achieve economic targets. On the other hand, postcolonial studies is associated with textual analysis and literary criticism, and focus extensively on representational practices without much attention to questions of poverty, state failure or unequal political, economic and institutional relations (Sylvester 2006, Harris 2008).
order are justified in places associated with stagnation and underdevelopment. Of these
dichotomies, West/non-West, developed/non-developed, seem to lie at the intersection of
global and national projects of development. Often perpetuating colonial relations of
exploitation, global development discourses and practices continue to separate the West
from the developing states. Yet, the pursuit of modernist development in the developing
countries, whether or not they were formerly colonized, is a replication of Western
development: Regardless of how the paths or strategies to achieve development are
described, the means to that end is assumed to be mimicry (Gupta 1998: 40).

Mimicry, a concept associated with Bhabha’s (1994) work, refers to the processes
that reveal doubleness and contradictions inherent to colonialism, whereby people and
places are forced to replicate Western forms and understandings (Harris 2008). Colonial
mimicry produces a reformed and recognizable Other, which is “a subject of difference
that is almost the same but not quite” (Bhabha 1994:126). By definition, mimicry can
never fully succeed as the dichotomy of backwardness also denotes a racialized position
which signals failure at postcolonial sites (Harris 2008). Like colonial mimicry, the
development discourse also produces the “underdeveloped” other, which is a categorized
as “a national community that is inferior, backward, subordinate, deficient in capital and
resources, and inadequate member of the international order” and whether it learns,
follows, replicates, repeats or improves the incitements of development discourse, which
at the end produces is a “shabby imitation of the “developed” (Gupta 1998: 40). Mimicry
is useful to explain projects of modernization and the desire to become part of the West in
many postcolonial states in their development trajectory. Analyzing the foundations of
the modern, secular Turkey, Harris (2008) argues that “Turkey became a mimic state par
excellence” as it adopted Western ideals of education, secularism and modernism in order to expel “Oriental” aspects of the Ottoman legacy and had a desire to mimic all that was progressive and good in the Western and European imagination (2008:1702).

Mimicry helps to ground contemporary desires to become part of the Western global markets in its postcolonial reality. Yet, mimicry alone cannot explain contemporary changes in the agricultural sector towards market-friendly and export-oriented direction in developing countries. This is an overt shift from the state’s earlier development strategy during modernization, which aimed to ensure national food self-sufficiency and pursue the paths of development of the “developed” countries. Debates among postcolonial development geographers that take political economy seriously have further relevance to understand the contemporary uneven neoliberal and globalizing economies and articulation of development policies under neoliberal capitalism (Radcliffe 2005).

Wainwright’s (2008) book Decolonizing Development is particularly helpful in understanding the hegemonic power of development. By calling into question “capitalism qua development,” Wainwright analyzes the relationships between colonialism and capitalism, between territory and the market through the history of the colonizing and developing Mayan indigenous population in Belize. From representation of the Maya as ancient yet backward people to representation of the Mayan farming system as problematic in the writings of ACS Wright, a soil biologist and a colonial officer in Belize, Wainwright demonstrates that development interventions in Belize show continuity from colonialism to developmentalism and perpetuate exploitative relations in the form of settling populations. Wainwright’s work provides crucial insights for this
chapter as it demonstrates the intersection of agriculture with colonial and development interventions.

From the lens of postcolonial approaches to development, the agricultural sector is absolutely central to the development of a “modern” nation state as the symptoms of “underdevelopment” are revealed clearly through the agriculture sector. The nation-state is portrayed as suffering from underdevelopment “if a high proportion of the net domestic product is dependent on agriculture and if a large proportion of its labor force is employed on farms (Gupta 1998: 40). As I elaborate further in Chapter 3, similar representations and definitions of agriculture are abundant in the contemporary development narratives of international organizations. From the modernization perspective, the relationship between “agriculture and development” is a straightforward position as agriculture is envisioned as an economic sector and development means economic growth, not only in colonial times but under global markets (World Bank 1982; Hetherington 2009).

In her analysis of the imperial contexts in which French and British commodity networks took shape in their former colonies in two Sub-Saharan African countries, Burkina Faso and Zambia, Freidberg (2004) also emphasizes the parallels drawn by European colonizers between rural “modernization” and the colonization of Africa:

In both rural France and colonial Africa, “development” was supposed to increase rural productivity, domesticate rural nature, and civilize rural peoples… In both places, development-as-modernization was seen as an evolutionary process, but one that, somewhat paradoxically, required the intervention of administrators, engineers, and educators” (Freidberg 2004:56)

Thus, the nation-state’s agenda for development becomes the promotion of national economic growth through the growth and industrialisation of agriculture. These
discourses reflect the European agronomists’ and visions’ of “never ending progress in and beyond the African farmstead” (p. 36), which can also apply to other parts of the developing world.

As food self-sufficiency becomes a critical geopolitical issue, the nation-states even resort to agrarian populist policies (Gupta 1998) to continue modernization of agriculture. Yet, this is not a straightforward project as development interventions or agricultural development policies create new subjectivities, which I elaborate further in Chapter 6, leading to resistance as well as complicity in contact zones of development. These contact zones are where the very dichotomies of West/non-West, developed/non-developed are understood and narrated by subjects of development, often leading to hybrid knowledges that weave traditional knowledge with a scientific narrative and explanation (cf Gupta 1998). Another concept useful here is Bhabha’s concept of ambivalence which explains the simultaneous complicity and resistance among the colonized/subjects of development (Harris 2008). The notion of hybridities and ambivalence can also present venues to explore lack of resistance to neoliberal regimes and schemes, and how the local ruling elite can be both complicit and resistant to neoliberalization (See Radcliffe 2005). The emergence of these hybrid knowledges and identities is particularly relevant to understanding the contradictory attitudes within the state towards neoliberalization, the blend of protectionist agricultural policies with integrationist drives, evident in the implementation of current development projects. With insights from state theory, I elaborate these contradictory attitudes further through the World Bank funded Agricultural Reform Implementation Program (ARIP) in Turkey.
Postcolonial theory provides important insights to understand particular obsession with the Western and capitalist projects of development. Through concepts such as mimicry and hybridities, it also accounts for historically and geographically diverse and specific state formations, lack of resistance to neoliberal free-market ideology in many developing states and the hybrid implementation of neoliberalism. The overt shift to free market ideology is an aberration from the Western paths of development and raises questions about the relationship between postcolonialism and global capitalism.

2.3. Development Without the State? Structural Adjustment Programs and External Intervention

Despite the shift in state’s role under neoliberal capitalism and increasing interventions by international organizations, “there is much scope for economic and development geographies to consider the relationship and tensions between postcolonialism and global capitalism”(Blunt and McEwan 2002: 6). One assumption in this consideration is that the economic ideology of neoliberalism has been created in the West and continues to dictate the inferiority of traditional ways of doing things through structural adjustment programs or other interventions by international organizations. Issues from the expansion of neoliberal economic policies to the management of nature suggests that development practices in developing countries have an external orientation. In his analysis of establishment of urban water systems in Ghana, Yeboah (2006) argues that the economic ideology of “the West” through Bretton Woods institutions dictate the inferiority of the traditional way of doing things, perpetuating dependence on foreign sources of capital and expertise.
Questioning the flow of money and expertise from rich nations to poor nations in the name of “Development” (with a capital “D”), Spivak (1994) also interrogates interventions by the World Bank in developing countries. Spivak’s questions about “who gives” or “who can give” highlight the “coercive lending” solicited by the “comprador capital and a compromised state” (p.51). Through her analysis of the coordination efforts of the World Bank, by various business enterprises, consultancies, government allocations and international agencies over Bangladesh Flood Action Plan, Spivak argues that Bangladesh is “consultantized” and the rights of its people are effectively blocked. Spivak defines Development as “the dominant global denomination of responsibility” (p.52) and argues that the flow of money and skill from Europe to help people are not a response to “subaltern’s call”. Yet, Spivak also makes a distinction between the complicity of the Bangladeshi Green Party instrumental in the design and implementation of the Flood Action Plan and that of World Bank, arguing that the World Bank or “donor countries” have more responsibility in silencing the subaltern in development: “the complicity is in the abyssal power of “European” exchange, for responsibility is still traduced here by impatience and inattention” (p.63). Even with shifts to incorporate people’s participation and public consultation in the World Bank’s work, Spivak argues that the subaltern cannot speak with the representatives of Europe as the subaltern is silenced.

3 In discussing whether the subaltern can speak, Spivak (1988) talks about the subaltern in order to locate and re-establish a “voice” or collective locus of agency in postcolonial India and the epistemic violence in the constitution of the colonial subject as Other. Based on subaltern consciousness in Gramsci, Spivak argues that “subaltern” defines not only the economically dispossessed but persons and groups cut off from upward and outward social mobility. As these persons and groups were also cut off from the cultural lines that that produced the colonial subject, according to Spivak, the subaltern did not emerge in the colonial cultural value form. The colonized subaltern subject is irrevocably heterogenous” (284) but even subaltern studies assume pure consciousness. Whereas agency is “institutionally validated action, assuming collectivity, distinguished from the formation of the subject, which exceeds the outlines of individual intention” (Spivak 2005; 476), the idea of subalternity implies non-recognition of agency.
The deep textual analysis of Spivak (1994) raises further concerns about the relations between international financial organizations and the developing states, especially after decolonization. The first concern is about the “coercive” lending of international financial organizations through their development interventions. Second, although Spivak recognizes the complicity of developing states in such development interventions, she focuses on the “abyssal power of European exchange”. However, I argue that the developing state is not as “voiceless” when met with the forces of development.

2.3.1. From self-sufficiency to global markets: SAPs and Development

Scholars suggest that the Bretton Woods Institutions, mainly the IMF, the World Bank and the GATT/World Trade Organization, reflect an attempt since the 1980s to enroll the world economy into a set of policies and practices associated with neoliberalism (Agnew 2005; Hart 2010). These organizations have vast authority over global regulation of trade and finance and occupy a dominant role in many of the developing states. Both the World Bank, a multilateral development bank, and the IMF provide much needed loans and technical assistance to the developing states while

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4 Due to space concerns, I do not engage with the effects of incorporation of participatory development approaches in international financial organizations.

5 Recognition of state’s agency, even under extensive development interventions of international financial organizations, requires a further look into subject formation under the forces of development. Although subalternity applies to subject positions of people, it can also apply to define the position of developing states vis-à-vis contemporary neoliberal development agenda. Subaltern denotes the identity of those marginalized, oppressed, silenced and exploited and cut off from the centre. In today’s world, the subaltern must be rethought. Spivak argues that the subaltern is no longer cut off from the lines of access to the centre. Indeed, the centre, as represented by the Bretton Woods agencies and the World Trade Organization, has found new ways, such as biopiracy, intellectual property rights or pharmaceutical patenting, to generate a subaltern subject asking to be used and exploited (Spivak 2005:483). However, “subalternity may not be useful to explain the situation of developing states under neoliberalism as it involves lack of recognizable basis of action. Developing states have an active role in the articulation of neoliberal development, which suggests they can take action not only as complicit actors but also as active decision-makers.
prescribing a certain vision of development through their policies, which include Structural Adjustment Programs (SAPs) and bilateral agreements (Boas 2008). It is the strong role of these organizations in development and expansion of neoliberalism has led to conclusions about the “power” of global organizations over the South.

The power of international organizations affects the language used to define the political economy of agriculture as “the pressure” for neoliberal reform in many “debt ridden” economies, including Turkey. Yet, narratives about the dominance of neoliberalism extend to the “power” of regional institutional adjustments for economic integration such as NAFTA and the European Union (Aerni 2007; Peet 2007; Agnew 2005). These statements highlight the convergence of policies, approaches and interventions of international financial organizations that propose global integration and regional integration mechanisms, often leading to conclusions about the emergence of a global structure of neoliberalism. However, an analysis of development interventions of international organizations in the developing world within a historical context shows that such interventions are not unique to neoliberal times.

The encounters of the World Bank with developing states predate 1980s in the form of loans for construction of large hydroelectric or irrigation schemes, highways or modern port facilities. In their development practices and interventions between 1944 and 1980, international financial organizations emphasized the centrality of state sovereignty and assisted nation-states in the quest for development. These institutions took for granted the extensive state intervention in the economy, from controlling exchange rates to subsidizing investment and consumption (Edelman and Haugerud 2005). Although encounters during this period and transfer of both capital and expertise have been
critiqued, narratives about the “colossal power” of the international organizations, with headquarters in the West, refer to development interventions especially since late 1980s. This “pressure” or “power over” on many developing states to adopt neoliberal reforms could take various forms, such as coercion by the IMF and the United States to implement SAPs or the ideological shift and the hegemony of neoliberal development discourse in policy and academic circles (Harvey 2005; Ferguson and Gupta 2002; Peet 2003). The pressure to develop by the international financial organizations can also be read as the end of the state-led modernization projects.

The origins of post-1980 international development programs, mainly the SAPs, go back to the debt crisis in Sub Saharan Africa. Sometimes referred as stabilization packages or neo-liberal reforms, SAPs refer to a series of agreements between developing state governments and international financial organizations on exchange rate reform, privatization of state enterprises, tight monetary policies, reduction in service provision and social austerity programs and especially private foreign direct investment to “fix” the economic crisis (Watts 2000; Tausch 2003; Edelman and Haugerud 2005). SAPs presuppose a particular economic structure; a national economy, a balance of endowments and entitlements, balance of payments and patterns of state activity associated with investment, consumption and service provision. Yet, this particular vision of economic architecture has been reshaped through the changes under neoliberal

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6Although depicting the approaches mainly in Sub Saharan Africa, the Berg report, written in 1981, laid out the rationale for the World Bank’s future policies. The World Bank argued that Africa’s economic problems should be blamed on the interventionist states which distorted market prices to favor the development of inefficient urban industry over agriculture. It further argued that, in Africa, where the state became directly involved in production, it tended to be inefficient as the profit motive was lacking and there was no motive to upgrade processes or products (See Carmody 2001).
political and economic ideologies. These changes were also reflected in the redefinition of development and the scope of interventions in the economies of developing states.

The demise of the Bretton Woods controls beginning in the early 1970s and the globalization of capital have further contributed to the end of the “national development project.” The World Bank has shifted its focus from economic specialization within a national framework and self-sufficiency to specialization and participation in the world economy. This did not mean that states would not pursue development goals. Rather, these goals would serve global positioning of the national economy (McMichael 2000; World Bank 1980). Similarly, the WTO set neoliberal standards and rules for interaction in the global economy to enable unhindered capital flow in as much of the world as possible (Harvey 2005). This shift from a state-dominated development to a market-dominated one is also reflected in the restructuring of certain sectors for development in developing states, in which projects are designed to become competitive in the global markets (Gilpin 2001). However, focus on global integration creates tensions in certain sectors, such as agriculture, as the traditional development goal of self-sufficiency still carries political, economic and security connotations for developing states.

A further shift in the international development approach came with the emergence of a “Washington Consensus” after 1989 with the belief that markets can handle everything. Although commitment to the markets was downplayed with a new focus on poverty reduction in the late 1990s especially due to the criticism of SAPs (See Williamson 2002), the commitment to markets but not poverty reduction still continues to dominate the agenda of international financial organizations (Carmody 2001). Some examples of this commitment to markets include the reduction in official aid programs,
an increase in debt levels as a percentage of export earnings in the developing states and establishment of market-oriented entrepreneur-based development schemes (Edelman and Haugerud 2005). A recent World Development Report also demonstrates the limited application of poverty reduction goals, evident through the classification of developing states. For instance, Paraguay is classified as an “agricultural economy” because its growth is driven almost entirely by agricultural production (World Bank 2008). However, as Hetherington (2009) argues, the agriculture-led national growth in Paraguay over the last five years is reducible entirely to the boom in soybean production, enabled by genetic modification, and fuelled at least in part by speculation on biofuel markets, which has not lead to poverty reduction. Rather, soybean production for global markets has caused rural impoverishment by taking land and jobs away from smallholders.

2.3.2. Power Asymmetries and Development

Many developing countries are implementing SAPs to integrate into global markets, a decision that has implications for state interventions in agriculture. SAPs lead to discussions on the hegemony of neoliberal ideologies, which is based on power asymmetries. The main assumptions of SAPs are IMF domination over a fiscally weak, debt-ridden developing country (Ferguson and Gupta 2002), bourgeoisie wholeheartedly embracing and adopting neo-liberal policies at the expense of poor farmers (Balkan and Savran 2002), and political domination exercised by a unitary state over its people and territory. However, the trouble with this simple perspective is its assumption of power as an entity to be held which can easily shift across borders (Allen 2003). Power does not assume some form of undifferentiated spatiality, nor is it an entity
that can be possessed. Rather, power is exercised and it is the overall effect of strategies. Hence, power relations are actively constituted in space and time (Foucault 1977; Deleuze 1988). The reading of power as a relational effect of social interaction constituted in space and time challenges the view of asymmetries of power defined in a vertical relationship, where power is “something held over others” (Allen 2003: 26).

Moreover, it also challenges the “out-of-scale” images of international financial organizations. Indeed,

the image of mammoth economic corporations roaming the globe, or of the colossal influence of such worldly institutions as the World Trade Organization or the IMF…, each of which in its own particular way creates an overblown sketch of what these organizations are capable of bringing about (Allen 2003:36).

Through SAPs, international financial organizations facilitate the expansion of neoliberalism in the developing world. Yet, they are not the only actors that have “abyssal power” to decide the direction of development towards neoliberalism.

The inflated sense of power’s reach is misleading as the capacity of power is a euphemism for the resources and abilities that may be mobilized to produce an effect (i.e. coercion, authority, domination). From this perspective, international financial organizations mobilize their resources at the global scale that are crucial in the expansion of neoliberalism but their partly coercion-partly persuasion mechanisms are only the effect of mechanisms they use. Focusing on various factors, including the complex interplay of internal dynamics and external forces, Harvey (2005) argues that the neoliberalization project involves a wide range of factors, not only the strong influence of international financial organizations but also the state support and geopolitical considerations, affecting its degree in various political and economic contexts. Harvey’s
assumption is based on the assumption that even the most draconian of IMF restructuring programs are unlikely to go forward without internal support, and contingent geopolitical considerations, such as the United States protection for developmentalism in South Korea during the Cold War. Neoliberalism cannot function without a strong state, strong market and legal institutions. From this perspective, successful cases of neoliberalization restructurings cannot only be the outcome of external power orchestrations. The need for the state during neoliberalization reflects a pragmatic approach to reform the state apparatus to improve the competitive position in the global market and the need to respond to financial crises of all sorts (Harvey 2005; Peet 2003).

Another factor undermining the power of international financial organizations is the degree to which they have autonomy in forming and implementing the neoliberal policies often ascribed to them. Many governments adopted neoliberal policies without the prompting of disciplining of the “trinity” (World Bank-IMF-WTO) (Agnew 2005), which suggests that the policies were the result of independent intervention (i.e. Chile after 1973) or government-to-government imitation (i.e. neo-Thatcherite programs in the European Union since the late 1980s). These examples suggest the active role played by the developing state and its ruling elite rather than these organizations alone.

I question power relations in order to understand the spread of a neoliberal development agenda within global capitalist system, between international financial organizations and the developing states. While challenging perspectives that treat power

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7 This does not mean that I deny the progression of IMF reforms through coercion and force. Mitchell (2002)’s work is crucial to elaborate the adverse social and political outcomes of mainly IMF reforms at the national level. Mitchell argues that progress of Egyptian economic reforms did not mention the kinds of persuasion, argument, threat and violence that were required to carry out the free-market experiment. Those pursuing alternative political agendas in Egypt had very little space to maneuver before the economic reforms and already available opportunities, such as opposition political parties, the press or religious groups, were constantly narrowed.
as an entity to be held and define a single center in global geoeconomic system, I treat power as a relational effect of social interaction constituted in space and time (Allen 2003). This approach requires a focus on techniques of power to highlight lack of resistance and compliance with the development agenda at the global scale. Moreover, there exist multiple and interconnected arenas of exercise of power, inseparably linked with the socially and spatially uneven dynamics of capitalist development (Hart 2010). The state is indeed one of these multiple interconnected arenas where power is exercised.

2.4. The Neoliberal State and Development

The state remains crucial in development and the reconstitution of neoliberal regimes as state institutions is actively mobilized to promote market-based regulatory arrangements and to make nature enter into circuits of capital exchange (Brenner and Theodore 2007; Mansfield 2004; Peluso 2007; Bakker 2003). What animates our discussions of development today is the global and structural failure of delivering the promise of national economic development (Wainwright 2008). Although the form of state power may have changed in form, scale and type of practice or effectiveness (Peluso 2007), the nation-state is still perceived necessary in order to ensure the delivery of promises that the state actors have made (Wainwright 2008). From agricultural restructuring policies to environmental governance practices, the state also bears additional responsibility between the capitalist economy, civil society, and the natural environment because the nonhuman world provides essential material, moral, and aesthetic resources that sustain economic production and social reproduction, which are crucial elements for the sustainability of the state (Castree 2004).
Understanding the role of the neoliberal state in development and particularly in agriculture is not easy. It involves a close analysis of the contradictions of the neoliberal state and taking apart the process of neoliberalization to portray the neoliberal state in practice and to highlight the dynamics between processes on ground and the neoliberal structure relayed at the global scale. The general character of state under neoliberalization has demonstrated tensions and contradictions between neoliberal state theory and practice (Harvey 2005; Mansfield 2007b; Peck and Tickell 2002). The theory of neoliberalism argues for a minimal role of the state and limited interventions into markets, including the creation and preservation of an institutional framework appropriate to such practices. The neoliberal state favors strong individual private property rights, the rule of law and the institutions of freely functioning markets and free trade. The state can take actions to guarantee the quality and integrity of money, set up structures (i.e. military, defense, police, legal) and guarantee the proper functioning of markets and create markets, if necessary, in areas such as land, water, education, or environmental pollution. Sectors formerly run or regulated by the state must be turned over to the private sphere and be deregulated as privatization and deregulation, combined with competition would deliver the continuous increases in productivity and deliver higher living standards to everyone (Harvey 2005). This was defined as the “roll-back neoliberalism,” the state-authored restructuring in the late 1970s that was reactionary to any regulation and more concentrated on freeing the markets from state control (Peck and Tickell 2002).

Once such institutional framework for the proper functioning of neoliberalism is put in place, the neoliberal state constantly seeks out internal reorganizations and new institutional arrangements that improve its competitive position in the global market.
Thus, the ideal state provides property rights and basic infrastructural services. Yet it is a “minimalist state,” both in terms of its direct weight in productive activities and in terms of the extent of its indirect influence over the operation of market mechanisms (Öniş 1999a: 397). However, despite the transformation of this ideational project of neoliberalism into more or less coherent socioeconomic and state transformation programs, such as SAPs, the practice of neoliberalization demonstrate a plurality of practices—a series of “local” but interconnected neoliberalisms characterized by deeply ingrained institutional geographies, which still rely on the role of the nation-state for reregulation of market mechanisms (Peck 2008).

Geographers incorporated the “double movement” notion from Karl Polanyi to explain the endurance of the state under neoliberalism (Mansfield 2004). This double movement is often interpreted as the opposing actions of two different groups of people, organized along class lines: merchants and capitalists who benefit from free trade, and the landed and working classes, who do not demand protections in the form of controls on economic activity. As self-regulating markets never work, not only in their internal workings but also in their consequences, state intervention becomes necessary. State intervention can be both at the national scale, in the form of government intervention, and at the international scale, to supplement the imperfect self-regulation of the market (Polanyi 2001 [1944]: 216).

The internal crises in global capitalism in the 1990s were also crucial in the emergence of roll-out neoliberalism, (i.e., reregulation), which concentrated on institution building and governmental intervention, especially in social life (Peck and Tickell 2002). In particular, the World Bank also modified its predominant anti-statist approach towards
acknowledging the role of the state in development policies. Other factors, such as the combination of political ideologies and criticisms within the World Bank (Peet 2003), the evidence that markets by themselves cannot be relied on to reduce poverty and economies can flourish with a substantial degree of state intervention (Clarke 2008) were also crucial in this shift towards recognition of state’s role. Yet, this shift did not necessarily mean that the World Bank or international financial organizations gave up their concerns about the “the big state.” State interventions in agriculture, in particular, are defined as a burden to the economy, which requires a balance between roll-out and roll-back neoliberalism.

The neoliberal premise that open trade is a key determinant of economic growth and the only way to poverty alleviation is also reflected in the agriculture sector. In many parts of the developing world, a multitude of agreements, either bilateral or global, introduce agricultural trade reforms. Trade liberalization has meant elimination of agricultural subsidies by the state, price reform, reduction in tariffs, privatization of parastatal agricultural research and development organizations (such as agricultural enterprises that purchase crops or seed breeding programs) (Tutwiler and Straub 2007). Neoliberalism also affects the implementation of market-led agrarian reforms for land distribution, in countries such as Brazil (Wolford 2005, 2007). Although the influence of international financial organizations is evident in much of the neoliberal agricultural restructuring in developing world through SAPs, neoliberalization in the agricultural sector is not their imposition alone, which brings us to our earlier question on whether global trends are towards “development without the state”
Geographic scholarship has emphasized the importance of a process-oriented approach to investigate how neoliberalism becomes materialized in places and enacted in practice. This approach demonstrates that neoliberalization is underpinned by specific actors, institutions and discourses rather than an inescapable logic (Peck and Tickell 2002; Larner 2003). Indeed, attention to technologies of neoliberalism, the means through which neoliberal agendas are implemented and realized, shows that neoliberalization is the result of a negotiation process. In this process, both the power and interests of engaging parties are constrained by rules of global capitalist markets, which show variations in different contexts (e.g., bilateral talks, reciprocal feedback, etc.)(Davis 2003).

In sum, insights from the neoliberal state together with power asymmetries provide tools to interrogate the implementation of neoliberal development policies and question simplistic power-ridden assumptions about the spread of neoliberalism. Although state power may have changed in form, scale, type of practice or effectiveness (Peluso 2007), states are crucial for the smooth functioning of market forces, the basic tenets of neoliberalism. The state is involved in reregulation in order to deregulate by laying out legislative frameworks for private sector involvement. The state is often the main actor in implementation of neoliberal restructuring in many sectors, including agriculture. However, neoliberal changes also create new subjectivities as they fundamentally shift existing political, economic or cultural worldviews. Conceptualizing the effects of neoliberalism on the ruling elite requires some nuance in how we understand states. The state is not a monolithic actor. Thus, I argue that the focus on technologies of international of organizations and how incentives created by institutions
influence state preferences does not provide the full picture. Rather, we need to question how the politics within the state affects the neoliberalization outcomes.

2.5. State Theory: State as a Social Relation and Hegemonic State Projects

Geographical scholarship on neoliberalization that focus on the state has demonstrated how states “as complex, shifting and contingent assemblages of institutions, actors, policies and laws are engaged in balancing acts between enabling access to resources and yet also limiting it” because economic processes are hardly disembedded from the states and social relations (Peluso 2007:89). What remains puzzling and requires further analysis with regard to state actions are the complex motives and mechanisms by which state actors agree to neoliberal policies that, either intentionally or unintentionally, clash with the protection of citizens or territory, principles that give legitimacy to their rule (Peluso 2007). Marxist state theory can be instrumental in interrogating the struggles for capital accumulation within and beyond the state as neoliberalism can be approached as a variegated and internationalized state project associated with new material and transnational connections (Peck and Tickell 2002; Peck 2004)

Based on Jessop (2007), I approach the national scale not as a fixed or essential reality but an institutionally specific form of social relations, whose particular form results from a range of political and economic forces that occurred during the nineteenth and twentieth centuries. Conceptualizing the nation-state as the outcome of social processes, struggles and as a specific form under capitalist accumulation allows one to engage with the scale question while avoiding fixation with the nation-state and
maintaining an inclusive analysis of power relations working at multiple scales. Here, I use insights from Jessop’s strategic-relational approach that involves state projects, hegemonic projects and state’s strategic selectivity.

Following Marxist analysis of the social relations of production and the logistics of capital production, Jessop’s starting point is that the state is a social relation (1990:38). The state is centrally involved in the constitution of both the economy and social relations. As the shape, appearance and activities of a state may change over time, it is difficult to define the state in terms of its formal institutional features, the foundational instruments or mechanisms of state power (Jessop 2007). Due to the complex and conflictual character of state apparatuses and institutions, it is important “to consider the complex forms of articulation among state institutions and between state and non-state institutions in the overall reproduction of capital accumulation and political domination” (Jessop 1990: 8). The mere existence of the state as a distinctive form of social relations does not automatically translate into a coherent, coordinated or reproducible framework of concrete state activities (Jessop 2007). Indeed, the functional unity and organizational coherence of the state as institutional assemble are the emergent, contingent, contested and potentially unstable outcomes of ongoing sociopolitical struggles between opposed social forces (Jessop 1990, 2007). Such struggles can manifest themselves in the shifts from protectionism to liberalism as a development strategy under different governments or as the ideological opposition between economic groups.

The state as an institutional ensemble, then, has no essential unity. Indeed, the unity of the various state apparatuses (i.e. political, legal, repressive, production) must be constituted politically (1990:8). Jessop distinguishes between political hegemony and
institutional unity. Whereas political hegemony is involved in securing the substantive institutional unity of the capitalist type of state form, institutional unity is the unification of the society that is divided into classes. To understand the ideological and material base for the relative unity and cohesion of the state, Jessop introduces the terms “state projects” and “hegemonic projects.” State projects attempt to integrate state activities around a set of common, coherently articulated agendas. Only through the mobilization and consolidation of state projects then the image of the state as a “unified organizational entity” can be projected into civil society. The interplay between state projects and hegemonic projects is key to understanding the state’s “strategic selectivity,” defined as a tendency to privilege particular social forces, interests, and actors over others (Jessop 2007). Through strategic selectivity, it becomes possible to analyze the role of political strategies in forging state’s institutional structures and modes of socioeconomic intervention.

The state operates as the site, generator and the product of strategies. State strategies may be oriented towards a range of socio-institutional targets. Those strategies oriented towards the state’s own institutional structure are conceptualized as “state projects” since these serve the narrower goal of granting some degree of functional unity to the state institutions, operational coordination, and organizational coherence (Jessop 1990:161). Other strategies oriented towards the circuit of capital or the maintenance of hegemony within civil society constitute “state strategies” as they represent initiatives to mobilize state institutions towards particular forms of socioeconomic intervention. Strategic selectivity results from dialectic of strategic interaction and sociopolitical contestation within and beyond state institutions. While state strategies generally
presuppose the existence of a relatively coherent state project, there is no guarantee that state projects will effectively translate into viable state strategies (Jessop 2007).

State projects and state strategies mutually condition and constrain one another. At certain periods, one of the state projects that successfully links the interests of subordinate social forces to the pursuit of a national-popular program advancing the interests of the hegemonic class or a fraction becomes hegemonic (Jessop 1990:161). The hegemonic projects are grounded not only in economic relations but are also oriented toward broader issues in the field of civil society and state in at least three ways (1990:208). First, by integrating various strategically significant forces as “specific” interests, a given hegemonic project privileges certain particular interests compatible with its conception of the general interest but derogates from other competing or contradictory particular interests (2007:30). Second, the hegemonic project involves the formulation of a general, “national-popular” project, the realization of which also advances the particular economic-corporate interests perceived by subordinate social classes. Third, it involves “the specification of a policy paradigm within which conflicts over competing interests and demands can be negotiated without threatening the overall project” (1990:210). I believe that the concept of hegemonic project can explain the state’s shifting but also enduring modes of economic intervention in development, in line with global markets.

Geographers have examined the state projects of neoliberalization in different contexts. An example is MacLeavy (2007)’s work on state restructuring under New Labor regime in England. Through an institutional study of public policy making, MacLeavy demonstrates the shifts in government action (and inaction) in relation to broader neoliberal regimes. MacLeavy argues that dispersed micropactices are linked
and codified as state projects, which then are formulated and realized at subnational, national, and supranational scales. MacLeavy’s work is helpful in bringing together insights from state theory with other perspectives such as neo-Gramscian and Foucauldian analysis of micropractices that account for various, and sometimes conflicting, motivations within the state towards neoliberalization. Another work that is useful is Essex (2008) work on the restructuring of foreign aid through USAID. Essex work shows how the state project of neoliberalization is concerned to normalize and naturalize conditions such are free trade and public sector austerity, involves shifts in state’s foreign policies. Accordingly, the changes in the criteria by which states are deemed as deserving of foreign aid or not are an outcome of the problematic relationship between security, liberalization, and development in official rhetoric and strategies, as well as deep structural changes in USAID’s internal character and external relations. Essex’s work is significant in revealing the reflexive articulation of competing interests and projects at multiple scales. Within the United States, the state’s institutional materiality is articulated through connections between the ongoing restructuring of USAID at the national scale and its strategic prioritization of security and liberalization as conditions of development aid at the global scale. Essex’s analysis of shifts in regional integration processes as an economic state project of neoliberalization with implications for domestic and foreign policy provides useful means by which to analyze Turkey’s EU accession negotiations.

In sum, Marxist state theory through its concepts of state projects and hegemonic projects help to acknowledge both the economic and social struggles within the state underlying development agendas. The outcomes of these struggles emerge as
contradictory assumptions and processes that drive neoliberalization as a state project, which is not constructed solely in the global North nor exclusively in the South, but in both (Clarke 2008). Treating state as a complex contingent ensemble of institutions also help to demonstrate de-articulation and re-articulation of neoliberalism on the ground, mainly the reorganizing of principles, policies, practices and discourses of global structure of neoliberalism into new configurations or constellations (cf. Li 2007).

2.6. Conclusion

The nation state is an important actor in development, as the willful intervention of the state was perceived as a natural means by which to deliver the promise of “national economic development” (Wainwright 2008). I bring together various insights to analyze the persistence of the state under neoliberalization, the shifts in its role and power in neoliberalization. I argue that current interventions of states in development show parallels as well as overt shifts from historical development trajectories. I draw on insights from postcolonial theory to situate contemporary agricultural restructuring in its postcolonial reality. This points to parallels in its development trajectory since agriculture has been perceived as a key sector for economic growth in the past and as an accessory for poverty reduction and other development goals in the present.

An analytical framework that combines insights from postcolonial theory, state theory and questions of power relations is crucial to understand the complex and contingent shifts in the state’s role in development and agriculture and the current state project of neoliberalization. I argue that current attempts to become part of global or regional economic or political networks, such as the European Union, can be best
understood by critical engagement with postcolonial theory. By questioning the very desire of developing states to become part of the West, we can then question the dichotomies that create imagined geographies of development.

I also demonstrate the complex, contradictory and ambivalent character of development geographies through an analysis of power relations within the geoeconomic system to illuminate the extension of neoliberalism worldwide. The variegation in neoliberalism debates acknowledge different configurations of neoliberalism, based on social, cultural, political dynamics at the local scale. The assumptions about diverse neoliberalizations on the ground recognize room for the agency of developing states in implementing neoliberalism. Indeed, I argue that a close inspection of particular neoliberal economic and political projects reveals a complex and hybrid economic transformation rather than implementation of a uniform ideology, enforced from the international organizations. This variegation points to the gap in our knowledge about the power dynamics within and beyond the state to understand the neoliberalization process.

Another theme I elaborate on is the complex dynamics of the power of neoliberalism between the state and international organizations. I question the “conditionality” of development in order to challenge the common assumptions about the power of neoliberalism. I argue that approaching power as an effect of relations that are actively constituted in space and time (Foucault 1977; Deleuze 1988) challenges a vertical relationship of power, in which a singular center of power exerts influence or domination over other entities. Resonating with new approaches to state in terms of scaling of power to multitude of scales, the questioning of power relations in relation to neoliberalism also allows room to address the articulation of neoliberalism by individual
developing states. As such, it becomes possible to read neoliberalization beyond a simplistic mirror reflection of a global structure of neoliberalism by voiceless developing states but as articulations (reworking, partial implementation and negotiation) by free agents.

Questioning power relations beyond the state is helpful but still limited in its ability to understand complex motivations of developing states towards neoliberalism. By disintegrating the power within the state and approaching the state as a social relation and an institutional ensemble, I argue that the state does not exist in unity but is prone to struggle between different state projects. The approach to the state as institutional ensemble also helps to analyze power emanating within the state, not held as authority but constituted through articulations and struggles within state institutions. The concepts of state projects and hegemonic projects are also helpful to question the economic and political unity within the state and the shifts in the state’s development choices. These two concepts come in handy to explain the formulation of a national-popular project from neoliberalization and the perceptions of particular economic-corporate interests associated with regional integration. The analysis of the state as institutional ensemble also serves to grasp particular ways in which power take effect without placing power in a central, unitary, singular actor, such as the state.

Insights from postcolonial theory, state theory and questions of power are particularly relevant to address the continuities and shifts in development approaches to agriculture under neoliberal schemes. First, agriculture has been relegated a key role in development as in the past development of postcolonial states. Although there has been a shift in understanding of the role of agriculture in development in line with shifting
definitions of development, especially with the change from national-self-sufficiency emphasis to integration with markets, the intervention logic in agricultural development continues. Second, agricultural restructuring demonstrates the transition from state project of modernization to state project of neoliberalization. Revealed in its postcolonial reality, agricultural restructuring then reflects the desires to catch up with the Western level of development now redefined as becoming competitive in global markets dominated by Western states and capital. Third, agricultural restructuring under neoliberal schemes reveals much about power struggles within the geoeconomic system between international organizations and states, and within the states.
Chapter 3: The Turkish State and Development: Agriculture through Modernization, Neoliberalization and Europeanization

World Bank officials do not come suddenly to Turkey to suggest implementing a certain reform. Turkey follows global trends and defines its priorities in development plans... Indeed, Turkey experimented with alternative crops in 1990s long before ARIP [the World Bank-funded Agricultural Reform Implementation Project] (Personal communication, SO8, 2007, Ankara, see Appendix A)

The restructuring of Turkish agriculture is necessary. Even if Turkey does not want to, it has to reduce the level of protection in agricultural products since the trend in international trade of agricultural products is toward a further reduction in protectionist mechanisms. Indeed, the steps towards liberalization of trade in agricultural products can create opportunities for Turkey ... Moreover, European Union accession also accelerates the necessity of transformation in Turkish agriculture (Turkish Industrialists’ and Businessmen’s Association, 2006 statement on the WTO)

3.1. Introduction

Does agricultural restructuring in Turkey create further economic opportunities by improving competitiveness and better integration with global markets or destroy Turkish agriculture? Regardless of the outcome, agricultural restructuring in contemporary Turkey, underway since the turn of the twenty-first century, is an important aspect of Turkey’s development. It also demonstrates the complexity of neoliberalization in Turkey and highlights both the shifting and continuing role of the state in development and the contingent assemblages between national and global institutions, actors and policies. An important question in this respect is the extent to which Turkey went beyond the influence of the global framework of general agricultural restructuring of the World Trade Organization (WTO) and similar international institutions and started to legitimize
all its changes to harmonize with a dynamic European Union (EU) acquis (Günyaydın 2010). Because the state project of neoliberalization is realized and transformed through the messiness of politics, lived experiences and actual geographies (Heynen et al 2007), an analysis of neoliberalization enriches our understanding of the elements of the neoliberal state and its role in development in practice. Thus, I portray an existing state project of neoliberalization by situating it in a historical context, in which the state’s changing role and capacity to maneuver under forces of globalization and regionalization enhance (or undermine) neoliberalism.

I focus on the dynamics between processes on the ground and neoliberal structure at the global scale by tracing similarities and differences between integration with global capital markets and Turkey’s historical national development agenda. I argue that Turkey’s current interventions in agricultural development, mainly through the World Bank-funded Agricultural Reform Implementation Project (ARIP) and the accelerated pace of reforms due to EU accession, can be better understood in light of their postcolonial reality. While acknowledging different phases of state involvement under neoliberalization, mainly the roll-back and roll-out of state interventions in the form of deregulation and reregulation, I question the redefinition and endurance of the Turkish state’s role in agriculture and development through the power dynamics within and beyond the state.

My analysis of changes in agriculture and development in terms of European Union accession and in a broader context of global neoliberalism is also timely and offers new insights about the political economy of development in Turkey. The persistence of two main critiques of neoliberal approaches to Turkey’s agricultural development has
encouraged a dichotomy in public discourse with implications for agricultural restructuring. The first critique, which is national-developmentalist in character, emphasizes strategies of national competitiveness and protectionism against neoliberal globalization carried out by the World Bank, the IMF, and the United States. Often, these strategies also criticize the European Union as a neoliberal and imperialist project. The second critique stresses liberal-leftist strategies that reject neoliberalism in the narrow economic sense. This critique does not reject globalization and differentiates the economic organizations of neoliberalism, such as the World Bank and IMF, and the EU. Thus, they support Turkey’s EU accession as a potential alternative model in democratic globalization (Ercan and Oguz 2007). This dichotomy is also reflected in scholarly work that analyzes Turkey’s contemporary changes. Whereas some scholars mainly blame neoliberal organizations, such as the World Bank and IMF, for agricultural restructuring (see Oyan 2002; Aydin 2002, 2005), others analyze current agricultural changes in terms of European Union accession (Aysu 2006; Eraktan 2007). The interviews I carried out are also divided along this dichotomy. Indeed, there exists very limited scholarly research about Turkey that situates current agricultural restructuring of the European Union accession within global agricultural restructuring frameworks (Günaydın 2010). Thus, liberal leftist accounts portray Turkey as “trying extremely hard” (Aydın 2005:162) to meet the requirements set by the EU without addressing neoliberalist influences on these changes. This is a gap I aim to address in this chapter.

In this chapter, I reinterpret previous academic scholarship not only through the theoretical insights provided by postcolonial theory, state theory and analysis of power relations, as laid out in Chapter 2, but also in line with primary sources such as official
documents and interviews I carried out in 2007 and 2010. My goal in following such a methodology is to question the dichotomy in political-economy circles that separate the globalization and regional integration agendas of international organizations. By demonstrating linkages in agricultural restructuring between the World Bank-funded Agriculture Reform Implementation Project (ARIP) and EU accession, I argue that Turkey’s state project of globalization cannot be disconnected from the state project of Europeanization. By elaborating on the Turkish state’s neither new nor submissive encounters with international financial organizations and by also tracing how European orientation has become a credible policy commitment that has helped the state win social support, I demonstrate how the Turkish state engages with, negotiates, accommodates and reworks neoliberal development. At the same time, insights from state theory show that the state is not a monolithic coherent institution but functions as a contingent and complex assemblage as revealed in official documents and interviews. Thus, by disaggregating the state as an institutional ensemble and questioning power struggles within the state, I challenge the tendency of current critiques—based on misperceptions of the state as a monolith and of centralized state power—to view the state as the full and unwavering ally of neoliberal institutions in the implementation of neoliberal schemes.

Finally, by tracing continuity in Turkish state’s development goals from early modernization to contemporary European Union accession, I aim to situate current changes, such as the 2006 Seed Law, analyzed in Chapter 4, within a longer historical political economy, disrupting the narrative of “crisis” due to current agricultural restructuring.
3.2. Continuity: Agriculture, Development and the Turkish State

Many scholars divide the history of Turkish agricultural development into two periods: the pre-1980s period marked by a developmentalist state agenda and the period beginning in the 1980s, which was characterized by a neoliberal market agenda and substantive shifts in the role of the state due to the demands or force of international organizations. Criticizing the curtailment of the state’s role in economic development and the withdrawal of state support for farmers, work on post-1980s Turkey discusses the transformation of rural structures and livelihoods and overall deagrarianization in the countryside (Aydın 2005; Balkan and Savran 2002; Yeldan 2006). However, I argue that the Turkish state’s interventions in agriculture and development from modernization to neoliberalization did not radically change despite deregulation and reregulation phases of neoliberalism and the redefinition of development goals. Similar to the statist and liberal cycles in its economy (Öniş 1996), I argue the state’s interest in and policy goals in development and agriculture are also cyclical.

I see continuity and shifts between these phases as reflecting tensions over intervention into development at the national scale. In this sense, the 1980s marked neither the “end” of state intervention and a neoliberal turn for Turkey, nor did the concurrent economic crises leave the state powerless vis-à-vis the demands imposed by international organizations, the EU and the United States. The 1980s cannot be singled out as the beginning of the liberalization efforts in Turkey because similar market-

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8 In his discussion of agricultural policies, Yavuz (2005) classifies two periods; first 40 years of the Republic (1923-1963) and the Planned Period (1963-2000). While some scholars also discuss the late Ottoman era (Dernek 2006; Topuz 2007), others prefer to analyze the policies until 1960s (Kayıkcı 2005) or 1980s (Aydın 2005) to discuss the shift in the Turkish state’s shift from developmentalist state to market orientation.
oriented projects were evident in both the 1920s and the 1950s, decades that were both followed by statist phases (Öniş 1999a). Moreover, despite a shift to an export-oriented strategy in development, neoliberalization in the post-1980 period in Turkey was of a neoliberal-populist variety and a considerable degree of protectionism existed in terms of microlevel state interventionism (Öniş 1999b). Only with the restructuring of key sectors, such as industry and finance since the late 1990s and mainly in the twenty-first century, can one talk of full-fledged neoliberalization in Turkey. Despite neoliberalization, the Turkish state maintained a significant role in articulating its own development agenda, which, coupled with the populist policies of individual governments, yielded a non-coherent neoliberal strategy (Yenal 2001).

Under neoliberal regimes, agricultural development has been an integral part of state interventions in development, similar to the role of agricultural modernization highlighted by postcolonial scholarship (Gupta 1998; Harris 2008; Wainwright 2008). Turkish state and EU documents about agricultural restructuring portray the Turkish state as suffering from “underdevelopment” because a high proportion of its labor force is employed in rural areas: “In most rural areas in the EU primary agriculture has become less important in terms of its economic weight and share of employment while the situation in rural areas of Turkey is just the opposite” (European Commission 2006: 1). This representation is related to similar dichotomies creating imagined geographies, whereby Turkey is located “just the opposite” or at an inferior position to the European Union in agriculture. This inferiority then motivates not only the Turkish state in its promotion of national economic growth through agricultural modernization but also Western experts by perpetuating their visions of “progress” beyond the farm.
Turkey’s encounter with international organizations and foreign development experts is not new, but the nature of its relationship with the IMF and the World Bank and interaction between international organizations have changed since the 1980s. In earlier periods, external resources promised by the IMF and bilateral donors were negligible compared to the scale of adjustment assistance made available during the post-1980 period (Öniş 1999a). Moreover, after becoming one of the first countries to receive and implement a structural adjustment program (SAP) in March 1980, the central role of the state as the guardian or manager of development, a main feature of earlier agricultural and rural development policies, has eroded. These changes raise questions about the nature of neoliberalization in Turkey and the power dynamics between international organizations and the state. However, it is not only the internal dynamics of Turkey but also internal shifts within the international organizations that have led to Turkish state’s reworking, redefinition and articulation of neoliberalism in agricultural restructuring.

An important change to bring about this articulation has been the interaction of Turkey’s state project of neoliberalization with its state project of Europeanization. Scholars have often seen Turkey’s modernization, development, and now its European Union accession as part of a continuing Westernization projection culminating in and confirming Turkey’s identity as “European” (Harris 2008; Keyder 1997). Besides an issue of identity, the EU has now become the “collective medicine” for member countries to adapt into global capitalism and competition in a neoliberal period (Paasi 2001). Such overlaps are significant especially in Turkey’s agricultural restructuring.

I focus on World Bank-financed ARIP to demonstrate the complex relationship between international financial organizations, the state and the EU. Following the
financial crises of 1997 and 2001, the IMF and the World Bank promoted major macroeconomic and agricultural restructuring as part of Turkey’s recovery package. The main philosophy of ARIP is “to liberalize Turkish agricultural markets and market organizations, to remove input subsidies and to compensate farmers by means of non-distorting direct income support” (Oskam 2005:133). However, the design and implementation of ARIP demonstrate articulations of neoliberalism in Turkey as a reflection of power struggles within the state, resistance and compliance of state officials in the expansion of neoliberalism, and connections between globalization and regional integration. I also argue that understanding ARIP’s focus requires attention to the development trajectory of Turkey and situating contemporary agricultural problems and narratives in a historical and political context.

3.3. Agricultural Modernization in the Early Republic and State Intervention in Development

Continuity in the state’s mission to standardize the quality of wheat is evident in its modernization and liberalization-oriented interventions. Currently, the state provides seeds for crops according to regional and agroecological characteristics through state-owned farms, cooperatives and chambers of agriculture. Although minimized after 1980s, the state has maintained its protectionist role in agriculture, earlier attempts at which included regulation of wheat markets through the Wheat Protection Law (Wheat Law) (1932) and the establishment of a state-owned Grains Board, which was responsible for wheat purchases and setting minimum prices since 1938. The state also established agricultural research and breeding programs, and seed improvement stations (Braun et al
All these interventions suggest that the Turkish state has been crucial in defining what kind of seeds are grown for the markets. Changes through EU harmonization, such as the restructuring of the Grains Board in 2002, the 2006 Seed Law and regulations on licensed storage of grain in 2006 aim to redefine grain standards and improve the quality of grain in the markets from the seed to the harvest. These changes also reflect the state’s focus on modernization of all aspects of agriculture to serve different development goals.

Conditions faced by the new Turkish state after its establishment in 1923 helped to define its agricultural priorities. In the early years of Republic, about 90 percent of its population of 13 million was rural and engaged in agriculture. Agriculture meant not only the provision of food for the population but also livelihoods and employment for a majority of the population (Topuz 2007). The Turkish state engaged in full fledged modernization reforms and economic development and economic sovereignty were defined as the main tools to complete national independence, both from the remnants of the Ottoman Empire and from the European powers that Turkey fought during its war of independence (Eralp 1990; Ashford 1974).

The 1930s were defined by statism implemented through Five Year Plans (Aresvik 1975). The state’s main goals became national development and self-sufficiency in food provision. By designating three roles to agriculture—the provision of a national food supply, raw materials for the industry, and surplus capital through increased exports—the Turkish state also confirmed the centrality of agriculture to development (Topuz 2005). Global economic changes, most notably the Great Depression, also strengthened the role of agriculture in development. As the wheat prices fell sharply in
relation to global markets, the Turkish state assumed a more protectionist role in organizing both the production and distribution of wheat (Boratav 1988; Özbek 2003).

The leading and protectionist role of the state during agricultural modernization continued through the 1940s. Investment in agricultural research and development led to the release of first hybrid wheat variety in 1931, with ramifications for contemporary breeding efforts (Braun et al 2001; personal communication, SO2-2, 2009, Ankara). The state also delegated the Agricultural Bank with the responsibility of purchasing and selling wheat and the stabilization of seasonal prices fluctuations. The state also provided credits and machinery to farmers (Toprak 1988). Agricultural production became gradually more capital intensive as a result of both guaranteed state purchases of wheat and agrarian reforms involving credit (Aydın 2005).

The biggest change in this period to improve agricultural productivity came through the Land Reform and Homestead Act of 1945, through which the state consolidated the already existing situation of land cultivation and property patterns by sending traveling commissions to Anatolian villages to register the properties and confirm the titles of the peasantry who have been cultivating those lands (Keyder 1993). These interventions and similar efforts to modernize villages reflect the state’s holistic approach to rural development and included cultural, economic, social and public health dimensions. This holistic approach indeed helped to strengthen the owner-occupier

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9 Discussions on the agriculture as a burden to the economy can be dated to the statist policies on 1930s. For instance, although there was a limitation on the top limit, the State promised to meet the financial loss of the Agricultural Bank for its interventionist purchases and sales in the market. (If there was any profit, this would be used to construct storage facilities) (Tekeli and Ilkin 1982). During the interviews in 2007, many state officials voiced concerns about the “loss” of Agricultural Bank and Public Bank that was compensated by the State as “administrative cost” which led to the agricultural restructuring program in 2000s and in a sense, the justification of Agricultural Reform Implementation Program of the World Bank, implemented between 2001 and 2005.
medium-sized farmers who relied mainly on family labor (Aydın 1986; Keyder 1983). After World War II, Turkey witnessed the start of multiparty politics and the emergence of liberal economic policies. Although state decisions in agriculture were often shaped according to demands of large landholders (Kayıkçı 2005), the class configuration of Turkey did not allow pursuing a hegemonic state project as no single class could control the state. Short-term political considerations also often drove agricultural pricing policies (Aydın 2005).

The ultimate aim of state interventions in the 1940s and the 1950s was to increase production to ensure self-sufficiency. However, problems in the successful implementation of land reform, due to the lack of subsidiary measures, such as the omission of the Homestead Act,10 and the effects of World War II prevented an increase in agricultural production despite an increase in available land (Yavuz 2005; Dernek 2006; Topuz 2007). Thus, the state turned to Western aid to reconstruct Europe and international organizations, such as the World Bank, to increase agricultural production (Aydın 2005).

3.4. Agricultural Modernization: The Green Revolution and Global Integration

The introduction of labor saving technologies to enable the cultivation of more land in Turkey increased yields. The Marshall Plan, U.S. economic aid for Europe that was distributed beginning in the late 1940s, was crucial in the mechanization of Turkish agriculture as it provided large number of tractors and farm machinery (Aydın 2005; Kayıkçı 2004). Mechanization brought about several changes, such as an increase in

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10 The Homestead Act included measures that ensured the indivisibility of family size farms (land from 3 to 50 hectares), which would be possessed only by one individual and inherited only by single person. To protect these farms, the land could not be sold for 25 years (Keyder 1993).
income distribution, proper plowing and economic stratification within the farming community. Whereas middle and large size landowners plowed more pasture land, large farmers in particular bought or rented more land, which indirectly resulted in the displacement of small sharecroppers (Hirsch 1970). Mechanization, together with Turkish state’s investment in infrastructure and establishment of road networks, enabled the movement of both farmers and goods (Keyder 1993). As more people in the rural community purchased vehicles to carry persons and goods to and from markets, and used their tractors and trailers through new roads, farmers became more dependent on inputs and more market oriented (Aresvik 1975).

These changes are important in understanding Turkey’s contemporary agricultural restructuring and its relationship to agrobiodiversity in three ways: First, these changes reflect the expansion of capitalism into agricultural production, and the transformation of farming from a largely self-sufficient production process into a market-dependent process. As a process of primitive accumulation, these changes are characterized by the progressive separation of the farmer from certain means of agricultural production, including seeds, which now come to the farmer as commodities (Kloppenburg 2004). Second, together with other areas of development and increases in land under cultivation, Turkey’s agricultural yields increased significantly (Keyder 1993, Topuz 2007; Kayıkçı 2004). Increasing agricultural yields also echo the narratives between tradition and progress, discussed in Chapter 4. Third, farmers’ increased connections and access to markets also have increased the possibility of erosion of agricultural biodiversity in the form of loss of traditional varieties (Meng 1997).
elaborated in Chapter 5. Farmers have also become more market-oriented in relation to the redefinition of agriculture’s role in development.

The Turkish state still acts as the guardian or manager of national development, but now this role has shifted towards the specific integration of the Turkish economy into the global markets. As part of the internationalization of Third World agriculture, influenced by the U.S. model of development, the focus is now on the complementary nature of agricultural and industrial development. In this system, agriculture is envisaged as producing surpluses and exportable commodities to generate foreign currency for industrial use, and as creating a domestic market for industry. The focus on the transformation of pre-capitalist structures, acceleration of market orientation and capitalization of agriculture, together with shifts in the international division of labor delegated Turkey the role of producing agricultural raw products and exporting agricultural produce (Aydın 2005; Yavuz 2005). However, despite an increase in the area under agricultural cultivation and labor saving measures, the average national grain yield obtained per land did not improve dramatically for the rest of the 1950s until introduction of improved cultivars from abroad through the Green Revolution (Braun et al 2001).

The Green Revolution can be defined as a particular type of land-saving technology, that came as a package requiring high-yielding grain varieties (HYVs), increased fertilizer consumption and extensive irrigation facilities (Bayri and Furtan 1989). This package was in turn supported with subsidies, credit and support prices (Appendini 2002). A perfect example of the modernization of agriculture, the Green Revolution demonstrates how scientific principles were applied to agricultural processes
to improve yields in developing countries in an attempt to escape from perceived Malthusian limits on food supply (Willis 2005). The idea of the Green Revolution is based on the very dichotomies that privilege Western sites and ideals that continue to separate “modernity” and “tradition.” Some elements of the Green Revolution, resisted as an assault against national economy (especially in India and Mexico during the early implementation phase) also demonstrate tensions between self-sufficiency goals and market-orientation development strategies. These tensions were silenced through the use of food as a political weapon, as in the case of President Lyndon Johnson’s refusal to commit food aid to India until it adopted the Green Revolution in its national agricultural policy in 1966 (Curtin 2005). These tensions also demonstrate the power of the global geopolitical system in ensuring compliance with new market mechanisms, and the goal of creating “successful” examples to make the Green Revolution project global (Gupta 1998).

The Green Revolution also had to be articulated with state-sponsored programs to bring the fruits of development to the poorest people (Gupta 1998). Turkey also adopted the Green Revolution package, which included HYV wheat seeds and agricultural chemicals, and built extensive network of irrigation.\(^\text{11}\) State policies that aimed to modernize Turkish agriculture were multifaceted, and included easy credit and input schemes, such as state subsidies for HYV wheat seeds (Aydın 2005; Aresvik 1975).

Scholarship has discussed the paradoxes of the Green Revolution in detail. Some of these included the creation of spatial disparities in income generation, increased

\(^{11}\) By 1966, three state agencies (State Hydraulic Works, The Soil and Water Directorate and Agricultural Bank of Turkey) signed a protocol to accelerate the development of underground water resources for irrigation (Aresvik, 1975). With improved water control and irrigation, the state was able to extend its control over the rural areas and pursue its vision of development.
agricultural chemical use, increased agricultural yields and genetic erosion due to monocropping (Shiva 1991; Lawson 2007). Turkey also had similar paradoxes and outcomes of the Green Revolution. First, the Green Revolution technology did not benefit Turkish farmers equally. Nearly all farmers in the coastal regions (the Aegean, Marmara and Mediterranean regions) adopted HYV seeds within five years of their introduction. Whereas the Southeast Anatolia region lagged behind in the adoption of new varieties, often better-off farmers in Central Anatolia with access to tractors and other farm equipment adopted and benefited from the Green Revolution (Richards and Waterbury, 1990).

Second, the success of the Green Revolution depended on the technical assistance of experts from the United States and international organizations. As a precedent to the agricultural restructuring programs after the 1980s, Turkey revised its national regulations to facilitate the working of international organizations. Collaborations to increase wheat production included the establishment of an Inter-Wheat regulation Committee for the technical assistance of USAID team in 1967 (Aresvik 1975), multidisciplinary research collaboration with the Rockefeller Foundation and the Wheat Research and Training Project, which continued until 1982 (Braun et al 2001).

Third, the adoption of Green Revolution technologies changed the composition of agricultural biodiversity, which led to critiques that it represented a continuation of colonial forms of exploitation of the South and compromising the ecological diversity of traditional agriculture and genetic diversity (Curtin 2005; Juma 1989). In the coastal spring wheat areas, local wheat varieties were replaced with semi-dwarf wheat developed in Mexico by the International Maize and Wheat Improvement Center (CIMMYT), since
acreage sown to Mexican wheat increased dramatically (Braun et al 2001; Borlaug et al 1969). Turkey also imported American and Russian cultivars in the early 1970s.12

The outcomes of the Green Revolution in Turkey were mixed. It led to substantial increases in the agricultural productivity the 1960s and 1970s, bringing about needed changes and standards required by mechanized agriculture and increasing average wheat yields per area (Bayri and Furtan 1989; Braun et al 2001). However, this agricultural success did not come without resistance. Fears about loss of national control of food led to adverse publicity even before the farmers planted the HYVs. Such adverse publicity included accusations that America exploited Turkey and its cotton production and the claim that foreigners might even poison Turkish flour and bread with poisonous materials (Aresvik 1975). Although these criticisms are the precedents of the food scares that accompany state’s agricultural restructuring attempts (such as the protests against the new Seed Law in 2006), they also reveal the difficulty of maintaining the goal of self-sufficiency in agriculture.

The cyclic pattern between liberalism and protectionism continued in Turkey from the 1950s to the 1980s. Governments focused on further integration with world markets, which required extensive reforms in the agricultural and industrial sectors in order to attract foreign capital, produce industrial export products and reinvest agricultural surpluses in industrial development. However, Turkish state intervention was haphazard and dependent on individual governments’ orientation towards the free market or a planned economy. Whereas the 1950s was characterized by a pro-market orientation, a planned economic vision characterized much of the 1960s. These haphazard approaches

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12 Since then, the Russian wheat cultivar “Bezostaja 1” has become a leading variety on more fertile winter wheat areas (Braun et al 2001). It is still widely used in northwest transition zone, one of the study sites in 2007 and 2009 growing seasons.
led to increased dependence on the imports of technology and other goods and borrowing from official and private sources (Aydın 2005). Thus, integration into world markets also marked the beginning of Turkey’s long relationship with the other international financial organizations, which led Turkey to receive its first MF loan package in 1958 (Zürcher 2004).

In the same period, the World Bank also played a crucial role in shaping agricultural policies in Turkey by financing many aspects of Turkish agricultural development, including huge infrastructural development projects, modern farming techniques, mechanization and other technical innovations, and the general export orientation of agriculture. The outcomes of these policies, which included improvements in social and economic infrastructure, such as schools, electricity, bridges, dams and irrigation, facilitated Turkey’s integration into the world markets (Aydın 2005). I argue that the Turkish state was the key actor in strategic decisions on agricultural development between the 1950s and 1980s, a role that suggests “conditionality” by international financial organizations could not limit the state’s ability to construct policies or institutions to meet internal demands for food.

3.5. Development Without the State? The Power of International Organizations and the Turkish State during the Agriculture Reform Implementation Program (ARIP)

Earlier criticisms of top-down approaches have led international financial organizations, mainly the World Bank, to revise its development policies towards a more inclusionary and integrated approach. This approach, outlined in the World Bank Development Reports, led to participatory development planning approaches. One such
example is the design and implementation of ARIP, carried out between 2001 and 2008. In order to address Turkey’s macroeconomic problems and mitigate the adverse effects of the 1997 economic crisis, the World Bank initiated dialogue with state officials and organized a series of workshops, leading to the inclusion of agricultural policy reform elements in the Bank’s Economic Reform Loan, effective the year 2000, and ultimately an IMF macroeconomic stabilization package. Currently, the World Bank emphasizes hybrid lending, which requires “hands-on” coordination by individual states to ensure success (World Bank 2009). This focus of the state also coincides with the reregulation under neoliberalism. Especially in the aftermath of the current global financial crisis, the World Bank has encouraged “spatially targeted interventions” of governments to help struggling economies and establish infrastructure to ensure greater regional and global integration (World Bank 2009).

These changes in the World Bank point to the state’s role in the coordination and implementation of restructuring and stabilization programs put in place by international organizations. Another important change is the incorporation of the ruling elites’ positions vis-à-vis development in the programs of international financial organizations. In Turkey, several components of ARIP were designed to serve aims such as commodity market development, land management and agricultural services, which would also prepare Turkey for its European Union accession (World Bank 2001; Oskam 2005). I argue that this incorporation of Turkish sensitivities and development expectations into ARIP reflect international financial organizations’ goal of bringing global and regional economic integration processes together. On the one hand, this incorporation of regional and global integration reflects the coordinated work among international organizations
toward the establishment of “the hegemony of a neoliberal economic order” (Günaydın 2010; Hennis 2005). On the other hand, cross-referencing between the World Bank and the European Union is not coordinated and it is not clear whether the World Bank focuses on all the changes the Turkish agricultural sector should take required for EU accession. Thus, although ARIP is broadly consistent with the long-term policy direction of the EU Common Agricultural Policy (CAP), it is not clear how, within its project duration, it would bring about changes that took the EU two decades to accomplish (Oskam 2005).

During interviews, a senior state official also confirmed the wide scope of changes: “Perhaps without naming it reform, ARIP could have become a series of projects that supported Turkey’s EU accession.” The official added “one cannot reform a sector for ten years” (Personal Communication, SO8, 2007, Ankara).

ARIP had four components aimed at liberalizing Turkish agricultural markets: 1) the design and implementation of a direct income support system to reduce price support through the establishment of a national registry of farmers; 2) the creation of a farmer transition system to cover the cost of converting from state subsidized crops, mainly hazelnut and tobacco, to alternative crops; 3) the restructuring of agriculture sales cooperatives and cooperative unions under privatization of state owned enterprises; 4) the establishment of an organization of support services to provide timely and accurate information about the reforms through a public information campaign (World Bank 2001). The project was originally designed as a multi-component single loan but only the first three components were realized by the end of 2005, and the World Bank provided further funding under the farmer transition component. The addition of new
subcomponents to ARIP in 2005 has repercussions for the extent of neoliberal reforms originally envisaged in the project.

The reactions to ARIP parallel current debates about the power of international financial organizations in the expansion of neoliberalism. Scholars have seen the neoliberalization of agriculture in Turkey as reflecting the full-scale attack of international financial organizations and strong external pressure by the World Bank (Oyan 2002; Burrell 2005; Oskam 2005; Aydın 2005). However, official documents and interviews suggest that the state had a key role in the design on ARIP. The World Bank states that “ARIP supports the government’s agricultural program”:

Originally, the World Bank discussed with the Government a multi-component single loan, which would have the components currently envisioned by the ARIP,... However, it is clear that some of these tasks are more urgent than others to ensure the success of the program. Thus, the Government requested that we prepare a project to support these more urgent tasks on a priority basis, leaving some of the others for a later operation (2001:20)

This statement shows that the Turkish state had a role in the design of the project, and ARIP was not simply an imposition of the World Bank. Moreover, the Turkish state’s “resistance” to the full implementation of ARIP demonstrates the strong role played by Turkey in the effectiveness of neoliberalization in the agricultural sector.

The problems in implementation of ARIP cannot only be explained by blaming the “reckless government,” as often is the case, since defining the resulting crisis as a result of “regulatory failure” or “lack of transparency” often obscures the combined roles of international capital flow and local agency (Sidaway 2000). A senior state official who was present in the design of ARIP made a distinction between the agricultural restructuring “program” and the specific “project,” a distinction also evident in World

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13 I engage with criticisms of project making culture in Chapter 6.
Bank correspondence, and suggested that the “program” Turkey designed for agricultural restructuring was never implemented (personal communication, SO8, 2007, Ankara). As ARIP turned into a fiscal stabilization project, the state official continued that it did not make sense to “talk about its success or failure” in terms of agricultural restructuring. Another respondent from the ARIP implementation team made a similar argument regarding the significance of ARIP for the liberalization of Turkish agriculture, suggesting that the effects of ARIP were minor as the components that were ultimately included in the design were never fully funded. The problems in implementation of the neoliberal program of ARIP can be explored through “hybrid” subjectivities that the local ruling elite can be both complicit in and resistant to neoliberalization (Gupta 1998). Yet, an analysis of state officials’ declarations reveals problems about the long term visions of development within the state, reflecting a power struggle within the state.

Based on the statements of officials during interviews, I argue that the state knew the extent of changes to come with ARIP and articulated its role in implementation of neoliberal policies. In contrast to the view of “a certain reform” coming “out of nowhere,” a senior official who had connections to the Treasury stated that Turkey invited the World Bank officials to design the agricultural restructuring “program” in line with Turkey’s development priorities. The same official added that “Turkey follows global trends and defines its priorities in development plans,” suggesting a link between ARIP and the state’s neoliberalization agenda in development more broadly (Personal communication, SO8, 2007, Ankara). Moreover, the agricultural restructuring was shaped through several rounds of discussions with the Turkish Government and different stakeholders:
The Bank ...consultations took place in Ankara, Istanbul, Gaziantep and Izmir, and included Parliamentarians, local leaders (governors’ and mayors’ offices), business representatives, NGOs and the Bank’s key development partners...In order to attract more foreign direct investment, participants referred to the necessary legislative changes. Some participants suggested that select central bureaucratic responsibilities, such as the provision of permissions, licenses or some incentives, could be turned over to local chambers of industry or commerce. There was nearly full consensus regarding the need to speed up privatization. Finally, several participants suggested that a new strategy should be prepared for the modernization of agriculture (World Bank 2003)

The statements of the World Bank highlight the key role played by the Turkish state and discontent within different echelons of the state with the centralized state structure, pushing Turkey for further privatization and liberalization.

Insights from Marxian state theory, mainly “state projects” and “hegemonic projects” help to elaborate the power struggle within the state (Jessop 1990, 2007).

Unlike other World Bank funded projects which are coordinated and implemented by related state ministries or by a separate and autonomous technical assistance team, ARIP was coordinated by the United Nations. A senior official from the ARIP implementation team explained this as the result of the complexity of a coordination structure that included three ministries and seven subdivisions (Personal Communication, SO6, 2007, Ankara). However, the facts that funding came from the World Bank in the intermediate aftermath of a major economic crisis and that the Justice and Development Party (AKP) came to power in the first year of its implementation contributed to problems in terms of coordination, communication and struggles among state offices. As another senior state official clarified:

Within the first year of ARIP’s implementation, AKP Party came to rule in 2002. It also coincided with a period of a social transformation in Turkey ... When ARIP started the Ministry of Agriculture internalized neither the project nor the agricultural restructuring. Then, the organizational structure of Ministry of Agriculture was under the strong influence of the Nationalist Party. The Treasury
was the strongest actor then and it approved both ARIP and agricultural restructuring. The State Planning Organization did not openly support these two agencies yet had a relegated role because after the [2001] crisis, fiscal stabilization solely became the responsibility of the Treasury. Thus, the State Planning Organization presented challenges before ARIP’s implementation from time to time. The government also wanted to use ARIP to attack IMF and the World Bank … Moreover, ARIP started without a public campaign and neither the farmers nor state officials could learn what the project was about, which actually exacerbated the discontent within the state and among people against ARIP (Personal Communication, SO8, 2007, Ankara)

The lack of coordination and communication between different state institutions during the first phase of ARIP confirm Jessop’s (2007) arguments that the state is not a unitary actor and multiple state projects can exist that strive for domination within the state.

The first outcome of a power struggle within the state was the cancellation of the campaign to publicize ARIP. The State Treasury, which had almost completed the campaign preparations, did not launch it because of State Planning Organization opposition (Personal Communication, SO8, 2007, Ankara). However, multiple state projects exist through which cohesion and political unity are pursued and the state’s economic and political systems also privilege some coalition possibilities and some interest groups over others. Despite his initial negative reaction, the new Minister of Agriculture, who came to power after 2002, supported the direct income system introduced under ARIP, which in its first years provided $50 to agricultural land users per hectare of land and direct payments for selected commodities, such as tobacco (Oskam 2005). Yet, the earlier power struggle that culminated in the elimination of a public campaign resulted in lack of public engagement and support for ARIP. Negative feedback towards the international financial organizations also affected the project’s long term outcomes since components other than direct income support system, such as the restructuring of agriculture sales cooperatives and cooperative unions to privatize state
owned enterprises could not be fully implemented (Personal Communication, IO1, SO6, 2007, Ankara). Power struggles within the state about the direction of neoliberal policies demonstrate that the Turkish state could not simply copy global neoliberal prescriptions one-for-one, but articulated neoliberalization in different ways in order to make it correspond to both the agenda of international organizations and its own development agenda.

The Turkish state’s articulation of neoliberalization becomes evident in its efforts to justify neoliberal reforms through European Union accession. The findings from interviews with state officials show common agreement on ARIP’s positive effects on agricultural restructuring in line with Turkey’s EU accession, not only in terms of public discourse on neoliberal development but also material changes, such as direct income support (Personal Communication, SO6, SO7, SO8, 2007, Ankara). Coordination among international institutions also reflected this sensitivity towards EU accession. As a senior official stated, “The World Bank no longer asks what Turkey is doing for agricultural restructuring but rather what it does for EU accession” (Personal Communication, SO8, 2007, Ankara), an indication of how closely the World Bank is following the negotiation process of EU accession. As the same senior official added, the EU does not directly tell Turkey what to do, but rather asks for it to “harmonize” with EU norms and practices. Turkey thus takes steps both towards regional integration with the EU and global integration with neoliberal markets. The articulation of EU accession with neoliberalization in the Turkish contexts suggests the transformation of EU accession into a hegemonic project, whereby collective practice, forms of knowledge and discourses on
“EU accession” become codified and mobilized to advance particular interests within the state.

3.6. European Union Accession as Turkey’s Hegemonic Project

...the only real ‘other’ of Europe is Turkey. (Tekelioglu 2007)

Postcolonial theory helps to explain Turkey’s Europeanization project and European Union accession negotiations, which started officially in October 2005. Turkey’s attempts to become part of the now European Union can be traced to the foundation of modern Turkey. As the Turkish state fully incorporated Western and European ideals, from Western ideals of education, secularism and modernism to a repugnance of “Oriental” aspects of the Ottoman past, it also reinforced dichotomies between European modernism and non-European tradition. My main concern here, however, is to examine Turkey’s integration with Europe, which has been one of its “state projects” since its initial application for membership in the European Economic Community in 1959, and shed new light on Turkey’s state project of neoliberalization. Although integration has often proven a source of discontent among political constituents, it has also become a credible policy commitment for the state and has helped in mobilizing social support since 2002 (Uğur 1999).

The state project of Europeanization offers an initial example to understand development trajectory of the Turkish state. Through its modernization and development, Turkey became a “mimic state” par excellence (Harris 2008). As in colonial mimicry, current enlargement and regional integration processes of the European Union produce a subject of difference, whereby Turkey is almost European, but not quite (Bhabha 1994).
The idea of a single Europe, especially after the recent enlargement in 2004, has given way to “a multitier patchwork Europe” which created different degrees of Europeanness (Kuus 2004: 475). This classification and degrees of Europeanness also become evident in discussions about Turkey’s European Union accession. The beginning of accession negotiations puts Turkey into a “liminal space,” neither European nor non-European, neither inside nor outside of the West defined by the European Union. Within that space, Turkey is taking steps to become “European,” fulfilling the accession criteria in both political and economic realms.

Known as the Copenhagen criteria, these conditions require any country seeking membership of the EU to conform to conditions set in 1993. In broad term, the three accession criteria stipulate that a country must consolidate its democracy, respect the rule of law and human rights and protect minorities; it must have a consolidated market economy that has the capacity to cope with competitive pressure and market forces within the Union; and it must accept the Community acquis by taking on the obligations of membership, including adherence to the aims of political, economic and monetary union (European Parliament 2003). However, the European Union has presented Turkey with a strict negotiation framework and stipulations that were not been part of previous negotiations. These stipulations include the incorporation of political criteria defined as representing European core values and make it more difficult for Turkey to become a member. The final decision is also bound by a public referendum in France and Austria (Arvanitopoulos and Tzifakis 2009; Larrabee and Lesser 2003). Indeed, these stipulations produce a subject state representing the “other” of the European Union, whose progress is decided through “open-ended” negotiations and subject to the interpretation of other
members (Faucompret and Konings 2008). In other words, the outcome of negotiations does not guarantee Turkey membership as “It will be up to the Member States to decide in due course whether conditions are right for the conclusion of the negotiations” (European Commission, 2005: 3). The open-ended nature of progress evaluations related to the EU acquis reinforces dichotomies between developed and non-developed, the West and the non-West. However, even with its unpredictable outcomes, European Union accession has become a “hegemonic project” to mediate national development needs with global market demands under the Justice and Development Party (AKP) rule since 2002.

How did EU accession become a hegemonic project? The outcome of 2002 elections in Turkey was an “expected” surprise due to the political radicalization, ideological polarization and the economic crisis of 2001 (Yılmaz 2009). The moderate Islamic AKP won an undisputable victory in 2002 elections by securing 34 percent of the popular vote and, because of Turkish electoral laws, 365 of 550 parliamentary seats. Despite skepticism among its constituency that the EU would not accept Turkey as a full member due to a perceived religious definition of the EU as a “Christian club,” the leadership of the AKP committed itself to the cause of bringing Turkey into the EU.

Globalization and the AKP’s pursuit of EU accession in order to boost its electoral appeal influenced the outcome of this election in three ways. First, globalization has created a group of economic winners, such as TUSIAD (The Association of Turkish Industrialists and Businessmen) and MUSIAD (The Association of Independent Industrialists and Businessmen) that articulated different citizenship and economic claims, offering an opportunity to AKP leadership to construct a broad inter-class coalition. The economic actors, regardless of their identity and modernity claims, located themselves as strong
supporters of EU accession process (Keyman and Koyuncu, 2005). Second, the major financial crisis of financial globalization in 2000-2001, which resulted in massive collapse of output and even more rigorous IMF regulatory reforms, helped to discredit the established parties on both the left and the right (Öniş 2006). For instance, none of the three parties in the coalition that had governed Turkey leading up to the elections even secured enough votes to win a single parliamentary seat. Third, the prospect of EU accession encouraged the AKP to engage the challenges of globalization through deeper integration with the EU. EU accession then opened up an opportunity space for moderate Islamist politics by providing a source of protection against the secularist ideology of state politics (Yılmaz 2009). However, it became clear to the party’s leadership that the prospect of EU accession alone could not provide unity to all groups and could even exacerbate tensions between its generally conservative, inward looking constituency and the self-declared liberal, integrationist AKP leadership (Keyman and Koyuncu 2005; Yılmaz 2009). Thus, AKP leadership took action to bring its own constituency into state project of Europeanization through integration of state activities around a set of common interests and coherently articulating a pro-EU agenda, thus, securing its status as a hegemonic project.

The hegemonic project of Turkey’s EU accession also serves to integrate Turkey with global capitalist markets. The European Union is one of the most important political actors in the global economy today but also represents the regional context of globalization (see Öniş 2006). EU accession represents a route to competition and integration into global capitalism in neoliberal times. This is clear not only in the incorporation of economic criteria for accession but also other changes, such as Agenda
2000, which confirm the existence of a market economy and neoliberal macroeconomic indicators as the single matrix for successful EU accession (see Agnew 2001; European Commission 1999). The implications of market economy are also evident in agriculture, as the “European model of agriculture” incorporates measures to improve the competitiveness of rural areas by recognition that new rural and agricultural policies are increasingly driven by forces of globalization and the opening of agricultural markets world-wide (European Commission 1999; Bruckmeier and Ehlert 2002). Such changes also account for the increasing cross-references between the EU and international organizations over their agricultural development agenda in Turkey, presenting a similar “conditionality” mentality in terms of integration to both global and regional markets (European Commission 2007).

Like discourses on neoliberalism highlighting the “inevitability” of the process, Turkish state officials also emphasize the irreversibility of the EU accession process (Personal Communication, SO1-1, SO5, SO9, 2007, Ankara). Economic, political or social benefits of membership are present in the rhetoric. In a current public address the Prime Minister Tayyip Erdoğan emphasized the economic benefits of the EU to justify why Turkey needs EU membership and to continue its transformation:

> For some time, the share of the EU-members increased to 55 percent in our total exports. Some criticize it and ask why we are becoming an EU member. Where do we export? If we don’t become a member, where will we export? Geographically, Europe is closest and if we cannot export to Europe, where else will we export? (Radikal 2010)

Similar remarks were voiced by state officials interviewed, who suggested that EU accession will allow Turkey to become competitive in global markets, a goal consistent with the market-dominant development discourse (Personal Communication, SO1-1,
In a recent public address, Prime Minister Tayyip Erdoğan said:

We will not give up EU accession. We continue to do our homework. We suffered a lot. Those [countries] who suffered a lot [for EU accession] also struggled a lot. But at the end they became members. We will continue to work and succeed because if you don’t have the passion and stubbornness, you cannot make it. [Working hard for EU membership] is what suits us as a nation and we will do this (Radikal 2010)

Implicit in these remarks is the rejection of the Oriental self-image and the affirmation of the Turkey’s need to do its “homework” as all that is needed to become part of the West.

The irreversibility of EU accession, and hence its status as the “hegemonic project,” was also confirmed by several respondents during interviews. A junior state official working in a recently established European Union coordination department of Ministry of Agriculture, stated that “EU membership is the national goal and this cannot change within the next three or five years.” (Personal Communication, SO5, 2007, Ankara) This response also addressed the concerns of other state officials, who suggested lack of consistency and vision in the Ministry of Agriculture’s approaches to agriculture and development (Personal Communication, SO2, SO6, SO8, 2007, Ankara). It also demonstrated the implications of the “hegemonic project” of EU accession, such as the establishment of permanent EU harmonization teams in many state departments that often collaborate with other state department for harmonization with the EU acquis.

Therefore, as long as the government takes all necessary steps in the areas that the EU insists on as conditions for membership, Turkey’s economic transformation is presented to be “on track” (Nas 2008).

Regarding the impact of the EU accession process on agricultural restructuring, officials expressed divided views. Whereas some attributed the main transformative
effect to the EU accession, others mentioned the WTO compliance on agriculture as the main driver of change in Turkish agriculture. However, many agreed that the restructuring was necessary for Turkey to make Turkey competitive in the markets (Personal Communication, SO1-1, SO5, SO6, SO8, SO9). These remarks can be read as the internalization of neoliberalism, the new modality of government to extend market logic all forms of conduct and creation of new subjects (Rose 1999; Hayden 2003), as I discuss in Chapter 6. What is significant here is Turkey’s focus on European Union accession as part of its neoliberalization project. As a hegemonic project, European Union accession has successfully unified interests of various groups for the implementation of neoliberal schemes in agriculture. Yet, as it is, agriculture and rural development are reduced to a “chapter” in negotiations between Turkey and the European Union, to be dealt “technically” by a working group. This reductionist approach renders it difficult to assess the links of European Union accession process to the framework of global neoliberalization and presents challenges to situating agricultural restructuring and development policies within a broader context that includes social, political, economic and ecological aspects. It also makes it difficult to see the similarities between current agricultural restructuring policies and the Turkish state’s earlier, modernization-oriented state interventions in agriculture, such as those aimed at standardizing and improving the quality of wheat.

3.7. Conclusion

The Turkish state has been an important actor in the design and implementation of Turkey’s development agenda and still plays a key role in neoliberal agricultural
restructuring. However, there are debates over who makes the “final” decisions about agricultural restructuring. Is the state still holding the key to development? By analyzing the continuity in the role of the Turkish state from modernization to neoliberalization, I demonstrate the difficulty of highlighting the post-1980 period as the period of the “neoliberal turn” or withdrawal of the state from development. If a periodization is made, I show that the year 2000 and thereafter bring a substantive transformation in Turkish agriculture. Yet, even then, the extent of these changes is not a mirror-image of neoliberal global structure, prescribed by global governance mechanisms through WTO membership or structural adjustment programs. Through the World Bank funded ARIP, I argue that agricultural restructuring under neoliberalism is subject to articulations by the state in which it incorporates its own development priorities.

Geographers have demonstrated how neoliberal regimes transform based on actualities on the ground, which create variegated and diverse neoliberalizations. I argue that there exists continuity between state project’s of modernization and neoliberalization. Through establishing connections between the neoliberal development agendas of international organizations operating at the global and regional scales, I also argue that current state project of neoliberalization is inseparably linked to the spatially uneven dynamics of capitalist development and a reflection of desire to become part of the West.

By bringing together agricultural restructuring in Turkey through EU accession with those stipulations of the international financial organization, I argue that the shifting roles in the interventions of the Turkish state in (rural) development can be attributed not to the force of neoliberalism over the Turkish state but to the articulation between various
actors—the state, international financial organizations and the EU—at multiple scales. As one of the most important issues in terms of livelihoods, economic growth and sustainability outcomes, agricultural restructuring under neoliberalism reveals the complexity of neoliberalizations on the ground—the contingent assemblages between national, regional and global institutions and between actors and policies. An important issue to consider in this respect is whether Turkey implements neoliberal policies beyond the influence of global framework defined by international financial organizations and the WTO and justified through its development agenda. In these terms, EU accession becomes the key to legitimizing all kind of market-oriented development interventions.

As much as access to rich and functioning markets associated with Europe and an effort aimed at achieving competitiveness in neoliberal times, EU accession for Turkey can be read as a continuation of its colonial project of becoming part of the West. Today, the imagined geography of Europe, as a more developed, rich, modern realm guides the development agenda. As EU accession unites the interests of the AKP government in power since 2002 with those of divergent state interests, the EU is used to justify and extend neoliberal policies. In this sense, European Union accession has become the engine driving neoliberalization in Turkey today. Although the World Bank has implemented several projects and restructuring programs, the ruling elite could not unify diverse interests for full-fledged implementation of neoliberalism in these programs. By contrast, WB projects could also become successful after linking their development agendas to that of Turkey’s own development agenda towards the EU. As I trace the connections between the WB and the European Union and situate European Union accession in a context of neoliberal globalization, I aim to contribute to our understanding
of power dynamics embedded in the economic system, the technologies of neoliberalism significant in the spread of neoliberalism, and the agency of developing states in neoliberalization.

Focus on continuity and change in the role of the state in development has been accomplished through a multiscalar analysis. Based on the definition of development as intervention, I interpret Turkey’s historical national development agenda in agriculture in line with the interventions of international financial institutions and the European Union. I argue that these development interventions at multiple scales reveal not only the constant redefinitions of development at work, which have been particularly relevant in the dissemination of neoliberal economic ideologies worldwide, but also reveals the endurance of the state. The state is a necessary yet difficult element in neoliberalism. This difficulty becomes even more complicated in considering various interests within the state.

I approach the Turkish state as an institutional ensemble. The extensive number of departments responsible for implementing development policies, each with varying levels of power, makes it difficult to implement a coherent and consistent neoliberal policy. As the case of ARIP has shown, competition for dominance between state departments was so prevalent that some components of the project were never implemented. The difficulty of implementing ARIP in full within the duration of five years planned extended the project until 2008. This highlights the challenges of agricultural transformation in a short period of time, required by EU accession, the resistance and complicity played out by separate departments of state in the neoliberalization and the difficulty of the state in giving up its protectionist role in agriculture.
Chapter 4. Seed Governance at the Intersection of Multiple Global and Nation-State Priorities: Modernizing Seeds in Turkey

4.1. Introduction: The Changing Shape of Seed Governance

By containing within itself the means for its own reproduction, the seed is a carrier of valuable genetic resources. Farmers’ ability to replant saved seed is a way to minimize their dependence on commercial suppliers and thereby maintain control over farming practices (Mascarenhas and Busch 2006; Kloppenburg 2004; Louwaars 2002). Seed saving is also crucial for conservation because the process of choosing, replanting, and exchanging seeds relies on and increases diversity on the farm and in its surroundings (Zimmerer 1996; Brush and Meng 1998). Today, new pressure on the seed results from global efforts to “harmonize” regulations, establishing global minimum standards for sale, exchange, and breeding of seeds. Particularly as negotiated through the extension of intellectual property rights (IPRs), harmonization is a key moment of change in access to and control of plant genetic resources. This chapter analyzes this changing landscape of seed regulation by investigating changing seed laws in Turkey, an important center of agricultural domestication and biodiversity. Forged at the intersection of international pressures and national priorities regarding development, regulation, and conservation,

1 This chapter is an article co-authored with my advisor, Becky Mansfield, submitted to a peer-review journal. Here, it is presented with slight modifications, such as the addition of a table and a section defining the roles of the authors.
these seed laws are caught up in debates about food security, rural development, biodiversity, the role of the state, and globalization (See Louwaars 2002; Kloppenburg 2004; Tansey and Rajotte 2008).

Seed regulation is a product of the twentieth century, which witnessed agricultural intensification and the separation of farming from seed production (Dutfield 2008). If one concern justifying regulation was that farmers have adequate information about the seed they purchase, another was protecting the interests of seed businesses involved in commercial seed production, especially in the US and Western Europe (Tripp 2002, Dutfield 2008). What is new today is the push toward regulatory harmonization. Rapid change in the field of agricultural biotechnology and private sector growth in the seed industry have been accompanied by international pressure on individual countries to establish minimum standards for global trade. Especially over the past fifteen years, international and regional organizations such as the World Trade Organization (WTO) and European Union (EU) extended rules facilitating the commodification of seeds and privatization of seed sectors (Seshia and Scoones 2003). Although there is general agreement that national seed regulatory systems should reflect the economic, political, and technological situation within individual countries, global governance narrowly directs seed regulatory reform towards establishment of plant variety protection and IPRs for genetic resources worldwide (Tripp 2002; Louwaars 2002; Alker and Heidhues 2002). This narrow focus has generated controversy about the relationship between seeds and livelihoods, nature and culture, and farmers’ rights and food security, and it is likely to
complicate implementation of seed regulation in developing countries (Brush 2000; van Dooren 2008; GRAIN 2005a).

This chapter addresses these concerns by analyzing Turkey’s seed laws in light of contemporary global discourses and practices of seed governance. The chapter shows that international governance exhibits significant variation that creates room for maneuver for states such as Turkey—but that Turkey does not take full advantage of this space due to the ways it adopts dominant global perspectives on agricultural modernization and progress. To analyze the complex linkages and strategic elaboration of seed governance at multiple scales, the chapter used archival research and semi-structured interviews to identify the ambitions of the Turkish state in regard to seed governance.

While I carried out the semi-structured interviews with state officials, representatives of international organizations, farmer groups and non-profits in Ankara in Turkish, and translated the excerpts quoted in the text, the ideas in this chapter have been rewritten and revised together with the second author, my advisor Becky Mansfield. Whereas official regulatory documents provide evidence linking Turkey’s seed regulation to both globalization (i.e. multilateral agreements) and regional integration (i.e. EU accession), interviews provide further evidence about perceptions of key actors about harmonization, development, and conservation of traditional seed varieties. From these bodies of evidence, we highlight in Turkey’s seed governance process both discursive elements (e.g. multilateral agreements and European Commission declarations) and nondiscursive elements (e.g. economic practices and processes based on discursive knowledge).
4.2. **Seed Governance at The Intersection of International and National Goals**

Scholarship on the extension of global seed regulation to developing countries has noted the central role of the state in harmonization, inconsistencies between different regimes, and complexity of negotiations (Görg and Brand 2006; Tansey 2008; Munoz et al. 2009; Brand and Görg 2003; Wright 2008). One question is whether preventing the free exchange of seeds will disempower farmers, with negative effects on farmers’ livelihoods and agricultural biodiversity (Bentley et al. 2001; Tansey 2008; Zimmerer 2006b). Of particular concern are prioritization of Western and scientific knowledge over traditional and farmers’ knowledge, shifts in property regimes in relation to global commons, and implications of these shifts for food security and access to plant resources (Almekinders and Louwaars 2002; Roa-Rodriguez and van Dooren 2008; Brush 2000; Shiva 1997, 2001). While it is too early to measure quantitatively the effects of variety protection on plant breeding or agrobiodiversity conservation (Dutfield 2008), more work is needed on the process of harmonization, and whether and how it is contested.

This chapter expands on existing scholarship by analyzing the tensions and ambiguities revealed by the intersection of nation-state goals of development and the diverse priorities imposed by international frameworks. At the heart of this analysis is Turkey’s 2006 Seed Law, passed as part of a process of agricultural restructuring that has been shaped by EU accession, neoliberalization of economic policies related to both IMF and WTO rules, and globalization of environmental governance. As the agricultural hearth for wheat and a site where many farmers continue to use traditional wheat
varieties, Turkey provides an ideal case to analyze commercialization and privatization of plant genetic resources in relation to the state’s vision of progress and development.

It is common to approach global governance on seeds and patenting as a powerful articulation of scientific, biological, legal, and economic expert discourses that pressures developing countries to standardize their trade, use, and production of seeds (See Purdue 2000; Tripp 2002). This view seems to be supported by recent experiences across the developing world. From Kenya to Argentina, from Mexico to India, countries are adopting similar seed laws that favor commercialization and privatization of plant genetic resources (See GRAIN 2005b; Alker and Heidhues 2002; Brand and Görg 2003). Indeed, many countries use similar justifications for these seed laws, i.e. self-sufficiency in the seed sector, agricultural and economic development, and integration with the global economy. In this chapter, however, we suggest that this convergence results not from the simple imposition of regulation from above, but from the unwitting embrace of progress rooted in the history of capitalism and modernity (Cowen and Shenton 1995; Watts 1995). It is significant that the justifications countries use for their seed laws reflect longstanding ideas about agricultural and economic development, becoming part of the global economy, and—more generally—progress. Progress in the seed sector is often premised on a distinction between modern crop varieties (i.e. high-yielding, certified) and traditional varieties (i.e. farmer-saved, landraces, and semi-wild relatives of crops); the former is labeled “good” for development. Similarly, states also would like to establish a common market and regional agricultural policy to enable cross-border movement of
seeds at the regional level and have access to broader markets (FAO 2009). It is in this context that some developing countries initiate or harmonize seed legislation.

In light of this, we conceptualize seed governance as a dispositif, i.e. a heterogeneous ensemble of discursive and nondiscursive elements (e.g. institutions, regulatory decisions, and administrative measures) that is the product of an open-ended process of strategic elaboration among multiple and competing constituencies (Foucault 1990; Coleman 2008). Because an ensemble that is heterogeneous cannot operate uniformly, approaching seed governance as a dispositif interferes with all-too-easy conceptualizations of harmonization as a monolithic process. Instead, it calls attention to the relationship between power and knowledge—and in particular the relationship between power and ideas of progress. These power relations are constitutive of a field of knowledge in seed governance that influences how developing countries understand the world and act in accordance, thus organizing social and ecological change.

The next section clarifies the priorities of Turkey, showing that while there exist international pressures, Turkey has long been interested in regulating the seed as part of its modernization project. The longer, following section shows that contradictions in seed regulation are reflected as an array of choices for Turkey. However, instead of using this room to develop a sui generis system, Turkey’s interpretation of existing laws and decisions on how to “harmonize” reflect much of the dispositif of global governance of plant resources, which encourages commercialization and discourages seed saving by farmers. A recent analysis of seed regulation in the Philippines revealed ambiguities created at the intersection of global pressures and Filipino motivations, and concluded
that IPRs in plants is “a story of neoliberal restructuring” (Wright 2008:735). While noting similar ambiguities, this chapter demonstrates instead the complexities of seed regulation that result from how contradictions among different international regimes intersect with the articulation between nation-states and international organizations.

4.3. The Seed in Turkey’s Modernization Project

In the mid-2000s, Turkey moved to harmonize its seed sector by extending both plant variety protection (PVP) and IPRs in agriculture. Two important steps in this process were adoption in 2004 of a new Law on the Protection of Breeders’ Rights for New Plant Varieties (PVP Law) and the 2006 amendment of its Seed Law, which dates to 1963. These laws symbolize the scope of change in terms of access to plant genetic resources in Turkey; they also inspired several protests across the country. Adopted to improve the quality and yield of plant production and to restructure the seed sector, the law regulates seeds not only of field crops, vineyards, and garden plants but also of forest species, as well as all propagation materials. Moreover, the law brings a new distinction between “genetic resources” and “plant varieties”. “Plant varieties” are those registered and certified by the State, which are the only types available for trade, exchange, and distribution. Local varieties—those developed, exchanged, sold, and saved by traditional farmers over millennia—are considered “genetic resources” that cannot be commercially circulated. Administratively, the Seed Law keeps registration and certification duties with the State while also authorizing the independent Turkish Union of Seed Producers to advise the Ministry of Agriculture and Rural Affairs (MARA) over key issues in the seed
sector, such as establishing the trade system for seeds (Seed Law 2006; TURKTED 2009). As MARA may assign some of its powers to this Union, opponents are worried that this may lead to commercialization of seed production, distribution, and research and development. The Seed Law also brought extensive changes in terms of certification, which becomes mandatory under the new law for all seedlings. With specific provisions that prohibit seed production except in designated seed production areas, the Seed Law not only defines what is to be sold (only registered and certified seed) but also where it is to be grown (GRAIN 2007). For critics of agricultural liberalization, these changes represent the abandonment of the rural poor and an invitation to foreign multinationals to dominate local agriculture (Bentley et al 2001; Tripp 2002; van der Meer 2002).

It is not clear whether the Seed Law and related changes will lead to “[the rebuilding of] the Turkish seed industry [which will become] a model for countries…to make progress in agricultural development” or will undermine food sovereignty, farmer livelihoods, and Turkish biodiversity (Duval 2009:7; ZMO 2006). What is clear is that seed regulation in Turkey is consistent with its history of agricultural policy. Recent policy documents reveal a focus on development and modernization of the agricultural sector to become competitive in the global economy through improving agricultural efficiency and competitiveness, emphasizing, for example, increasing yields and overall production levels, expanding cultivated land with heavy public investment in irrigation, and raising agriculture incomes with output price support policies and protective trade measures (World Bank 2004; EU-Turkey Joint Committee Report 2006; IFAD 2006; State Planning Organization 2004). The seed sector has always been crucial for the
Turkish state’s agricultural modernization policies. Indeed, since establishment of Turkey in 1923, state officials have worked to ensure self-sufficiency of seed production and supply of field, industrial, and vegetable crops. Turkey passed its first national seed law in 1963, Seed Law No 308, which aimed to provide high quality seeds to farmers. The 1963 Seed Law also established the national framework for seed quality control and certification, and authorized the Variety Registration and Seed Certification Center (VRSCC), on behalf of MARA, to register seeds that are produced, sold, distributed, exported, and imported. Seed prices were also fixed by the state based on the cost of production. As imported and exported seeds were subject to controls by MARA, the 1963 Seed Law made it obligatory to obtain import or export licenses and VRSCC became accredited by the International Seed Testing Association and Organization for Economic Cooperation and Development. EU countries have historically been important trading partners, especially in agricultural products, and in 1989 Turkey became an Equivalent Third Country, recognized for having crop inspection and seed production controls similar to those in the EU (Pray 1998; Bozkurt and Engiz 2001).

Recent seed governance reflects this long history of domestic concern regarding the modern seed and Turkey’s place in global agriculture, in which development is juxtaposed against conservation and progress against tradition. During interviews, several state officials and private sector representatives linked current changes in the seed sector to Turkey’s globalization project. They emphasized the requirements of global integration, the need to become part of global trade in seeds, and maintain the standards and volume of seed trade with the European Union. However, some state officials and
non-governmental organization representatives emphasized that the pace of change in agricultural policy is accelerated due to Turkey’s EU accession, which started in October 2005. There are large incentives for Turkey to take steps to become an EU member state because under the Common Agricultural Policy members can receive EU direct payments and support for rural development, as well as more general funds for structural and cohesion policies (Burrell and Oskam 2005). Thus while not imposed in any simple sense, Turkey’s Seed Law was adopted in relation to a global seed dispositif that includes discourses on traditional vs. modern seeds and administrative actions to privatize the seed sector. The next section will show, further, that global seed governance is itself complex and at times contradictory, a situation that leaves room in which Turkey could develop an alternative regulatory system.

4.4. Contradictory Aspects of Global Governance of Seeds

Global governance of seeds comprises a web of concerns, motivations, and agendas that bring about sometimes overlapping but often conflicting measures for access to and distribution of plant resources. This section discusses tensions and ambiguities in the most common mechanisms in international frameworks and discusses implementation of these mechanisms in the Turkish context. These mechanisms can be grouped into three categories: (1) limits on use and exchange of commercial seeds; (2) limits on use and exchange of non-commercial “traditional” seeds; and (3) limits on collection and use of naturally occurring plants. Although a single international framework may regulate more than one of these simultaneously, analyzing them as at least partly distinct will help
demonstrate how seed regulation and its harmonization are not monolithic processes but instead are open-ended and shaped by multiple constituencies (Figure 4.1).

4.4.1. Regulating use of commercial seeds: variety protections and property rights

At the global scale there exist two main mechanisms for regulating the use of commercial varieties for breeding, both of which reflect the interests of the private plant breeding industry. The first, plant variety protection (PVP) (also known as plant breeders’ rights), provides breeders exclusive rights to propagate and sell the protected variety and all varieties derived from it. PVP was established in the 1961 International Convention for the Protection of New Varieties of Plants, which also established the International Union for the Protection of New Varieties of Plants (UPOV); the convention was last revised in 1991. UPOV was written mainly by European countries, and was designed to accommodate capital intensive, large-scale commercial agricultural systems that are characteristic of Europe. UPOV criteria for eligibility for PVP include distinctness, uniformity, stability, and novelty, a set of criteria that generally exclude traditional, farmer-saved seeds (Rajotte 2008; Dutfield 2008). While traditional varieties may be distinct, they are not new, as they have been in use for generations and were not developed in a modern laboratory (Alker and Heidhues 2002). They are not uniform, as it is in their diversity that farmers’ varieties act as a form of insurance for small farmers, providing resistance against pests, diseases, and heterogeneous climate conditions. Nor are they stable, but evolve constantly.
<table>
<thead>
<tr>
<th>National Framework</th>
<th>International Framework</th>
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| **Use of naturally occurring organisms for breeding; benefit sharing** | CBD (1996)  
*No national targets for specific programmes of work established for agriculture  
*Art 8 (in situ cons), Art 9 (ex situ cons), agrl biodiv high priority  
*National Law prohibits definition of ‘indigenous community’ | Convention on Biological Diversity (1992)  
*Soberign rights of nations over biodiversity  
*fair and equitable sharing, and mutually agreed terms for access to genetic resources |
| **Use of commercial varieties for breeding** | WTO member since 1995  
*Will take steps for IPRs (WIPO + EU)  
Yet, different state agencies involved...  
*No discussion about sui generis system | Trade Related Intellectual Property Rights (TRIPs) (1994)  
*Art. 27.3 (b). Plant varieties can be excluded ‘effective sui generis system’ |
| UPOV 1991 + EU Directives 2100/94 and 1768/95 | European Union  
*Council Regulation (EC) No 2100/94 of 27 July 1994 on Community plant variety rights  
*EC No. 1768/95 implementing rules on the agricultural exemption provided for in Article 14 (3) of Council Regulation (EC) No 2100/94 on Community plant variety rights |
*Unauthorized propagation and sale of seed forbidden  
*State may allow on-farm seed saving for private use |
| Law no 5553 Seed Law (2006)  
(2 out of 12 related regulations released) | European Union  
-Directive 98/95/EC (amendment)  
* Allow the marketing of ‘conservation varieties’ |
| **Saving and exchanging seeds by farmers** | FAO International Treaty on Plant Genetic Resources for Food and Agriculture (2001)  
*Benefits from the use of plant genetic resources should flow to farmers collectively. |
| **The use of farmers’ varieties** |  |
| Directive on the implementation principles of farmers’ exception  
(based on Law 5042 Art. 17) |  |
| Small scale farmers, with land smaller than defined in Annex 1, who grow max of 92 tons of wheat/comparable Quantities are exempt from paying royalty |  |

Figure 4.1. Comparison of National and Global Framework on Seed Governance
The second mechanism is the extension of IPRs to plants and seeds, especially through the Trade Related Intellectual Property Rights (TRIPs) agreement. Incorporated into the WTO since its establishment in 1994, the chief concern of TRIPS was to establish a uniform legal and policy infrastructure for IPR in each WTO country (Roa-Rodriguez and van Dooren 2008; Roffe 2008). Explicitly covering plant varieties, Article 27 of TRIPs states that patent production must be available for inventions of both products and processes that fulfill the criteria of novelty. It also specifies that plant varieties can be excluded from patentability requirements under a national *sui generis* system based on the needs of domestic seed sectors. IPRs and PVP have also been supported by the EU. Since the 1960s, western European states have worked to promote the harmonization of patent rules, procedures, and principles among themselves. The EU now maintains a “Common Catalogue” of distinct, uniform, and stable seed varieties that can be marketed freely (GRAIN 2005a).

PVP and IPRs in genetic resources contribute to a shared global discourse, in which protecting commercial varieties leads to technological innovation, which in turn leads to economic growth and increased human welfare. By emphasizing novelty and creativity as means to define commercial varieties, this shared global discourse rests on a separation between nature and human endeavor. The discourse assumes a sharp separation between traditional farmers and scientific breeders, whose expert knowledge brings modernization and progress. Indeed, farmers’ seeds are not viewed as “plant varieties”, but rather are grouped with wild plants as “exotic germplasm”, that is, as genetic material falling outside the expert system (Purdue 2000) as part of nature. For the
World Bank, intellectual property rights are “a compromise between preserving the incentive to create knowledge and the desirability of disseminating knowledge at little or no cost.” (Alker and Heidhues 2002:62) Similarly, in 1999 the UPOV secretariat asked African states to adopt UPOV on the grounds that it would lead to an increase in quantity, quality, and diversity of foodstuffs, ensure food security, and lead to sustainable agriculture by a more efficient use of available resources and inputs (Ibid). Despite the ubiquity of this discourse, empirical evidence does not prove the link between increased welfare and ownership of seeds. For example, a World Bank study covering China, Colombia, India, and Kenya found that existence of PVP is not a necessary condition for a thriving plant breeding industry (Dutfield 2008).

Our data show that Turkish adoption of PVP and IPRs is connected to both globalization and Europeanization—but also to the global dispositif of modern seeds. Turkey has been a WTO member since 1995, the same year it started the process of European accession. Turkish officials declare that Turkey will take steps to establish a strong system of IPRs in line with the WTO and the EU (Turktarım 2004a). Interview respondents stated that Turkey’s seed regulation harmonization coincided with EU accession and was based on European law; they also justified harmonization in terms of the importance of Europeanization for Turkey. The 2004 PVP Law was based on both UPOV and two EU Directives (2100/94 and 1768/95). The 2006 Seed Law was specifically designed after EU Seed Laws that separate commercial varieties and “conservation varieties” (GRAIN 2007). More broadly, interview data suggest that Turkish officials perceive this approach in terms of development and agricultural
progress in order to “increase yields”, an emphasis that continues to dominate the Turkish state’s development agenda. Increasing agricultural yields is often put in terms of self-sufficiency in the face of population growth. A senior state official asserted that not only do “72 million people and 10 million tourists” need food, but food “consumption (in Turkey) is based on wheat.” Both state officials and private sector representatives linked increased yields to agricultural surplus and increased wealth. A state official suggested that “farmers also need development, as they need to feed themselves” whereas another official stated Turkey must “compete with the world and be able to produce surplus so that farmers can send kids to school” and “Turkey can compete globally.” This view also is promoted by the Turkish Association of Seed Industry, a non-profit organization that represents the Turkish private seed sector but which counts the Turkish state among its 68 members. It declared that “it is not possible for an unregistered sector of the economy to deal with R&D. The solution is to treat private companies within the framework of liberal policies, encourage them to sustain their brands both at the domestic and international level and avoid unregistered and illegal seed sales.” (Turktarim 2004c) In this sense, increasing agricultural yields contributes to the goal of ensuring food security, which is presented as one of the nation state’s main responsibilities. Officials celebrated the PVP Law as ‘doping’ for the development of the Turkish seed sector and agriculture and emphasized UPOV’s benefits for the country (Turktarim 2004b; Bilici and Köse 2006). However, the expansion of seed IPRs and PVP has repercussions for farmer-saved seeds. Both UPOV and EU Seed Laws have provisions requiring producers pay a royalty for varieties they have not bred themselves. Indeed, during interviews, both state officials
and private sector representatives acknowledged that paying fees to plant breeders has become the practice in Turkey for commercial seeds for vegetables, oil plants (e.g. sunflower) and cash crops (e.g. cotton). Concerns remain about the implications of the Seed Law for crops where the use of farmer-saved seed is traditional and still common, especially wheat.

4.4.2 Regulating farmer-saved seeds: the changing definition of “farmer privilege”

At the same time that global seed governance favors commercialization and privatization of seeds, it also limits non-commercial seed saving and exchange (Alker and Heidhues 2002; Almekinders and Louwaars 2002). While it is the case that seed saving among farmers is common not only in low-input farming typical of the South, but also in the highly capital-intensive, input-dependent agriculture of the North, (Cromwell et al 1993) its significance is different in developing countries. In many such countries a large proportion of the population depends on agriculture for employment and income, and a majority of the farmers are smallholders who rely non-commercial seed. Smallholders dominate Turkish agriculture, in which farmers with less than 50 decares of land constitute 65 percent of the total farmers. Although figures vary, the average agricultural land size is about 20 decares, less than one-third of the European Union average of 69 decares (State Planning Organization 2007).

While the UPOV system acknowledges the use of farmer-saved seeds by providing exemptions for small farmers, as UPOV has been updated there has been a trend towards further limitations on unauthorized propagation and sale of unregistered
seeds. For instance, UPOV 1978 acknowledged the right of farmers to re-sow seed harvested from protected varieties for their own use—known as “farmers’ privilege.” In contrast, UPOV 1991, binding for all UPOV members, declared that governments could use their discretion to uphold farmers’ privilege only if the saved seed is to be used on the same farm; this version of UPOV thus prohibits exchange or sale of such seeds. Another conflict emerges as UPOV’s rules restrict traditional farmers’ freedom to buy seed from sources other than the original breeders or their licencees. The UPOV system is designed to protect commercial seed companies, but in many cases farmers’ practices of cultivating seed that is not plant variety protected, including traditional or local varieties, are likely to be excluded from government-approved seed lists maintained under seed regulations (Dutfield 2008).

UPOV’s efforts to restrict traditional varieties can run up against other international agreements focused on saving them for conservation. For instance, at the regional scale, European Union Directive 98/95/EC allows the marketing of ‘conservation varieties’ and it addresses the need to amend various European Council Directives accordingly. Similarly, the UN Food and Agriculture Organization (FAO)’s 1994 International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) provides a general framework for conservation and sustainable use of genetic resources for food and agriculture. The ITPGRFA is an international multilateral system of access and benefit sharing for the germplasm of selected important crops, related knowledge, and technologies. ITPGRFA reflects the rising concerns over measures to extend private or sovereign control over genetic resources as well as
equitable sharing of benefits from the use of genetic resources (Roa-Rodriquez and van Dooren 2008; Halewood and Nnadozie 2008). However, despite its clear specification that such benefits should flow to farmers collectively, the contributions to ITPGRFA are voluntary and its definition of “farmers’ rights” has no legally binding meaning. (Kloppenburg 2004). As a signatory of ITPGRFA, Turkey could use its conservation-oriented provisions to develop a *sui generis* system protecting farmer-saved varieties, but research respondents had different views on the relative significance of the treaty. Whereas one senior state official and private sector representative separately suggested that Turkey did not take ITPGRFA into account at all in the preparation of the Seed Law in 2006, another state official suggested that ITPGRFA is likely to have the greatest effect on the conservation of genetic resources in Turkey and could provide the most challenging framework in terms of establishing farmers’ rights.

Turkey does not have a separate framework for farmers’ rights per se, but instead incorporated the use of farmers’ varieties and farmers’ seed saving and exchanging practices in the current legislation. In a recent Directive on the Farmers’ Privilege, Turkey defines the rights and responsibilities of farmers to save and reuse legally a PVP-protected variety. Farmers are exempted from paying royalty fees only if they meet certain criteria: 1) they propagate the material from their own land (and then only if they cultivate it themselves); 2) only to replant it on their own farm (no sharing, exchanging or selling), 3) only among the crops listed in the Directive, and 4) if their lands are small enough to grow less than 92 tons of wheat or comparable quantities in other crops in their
fields (maximum land size varies geographically, from 167 to 307 decares). No exemptions are possible for any hybrid or synthetic variety.

Interview data suggest it still unclear how these conditions will affect Turkish farmers’ seed saving and exchange practices on the ground. Not only has the Turkish government not yet decided how to pass royalty fee costs to farmers, but also, the level of certified seed use in grains is very low (as opposed to cash crops such as cotton and sugarbeet). Many farmers in northwest and central Turkey are unaware of restrictions to be imposed by the Seed Law and the Directive on the Farmers’ Privilege. Farmers can continue to save seeds for their own use (without having to register them) and to sell the crop from those seeds—as long as their activities do not involve any trade of the seeds, including barter and sales at local markets. Although legally farmers can continue to save seeds, conditions set can challenge farmers’ traditional privilege of exchanging and thus developing seeds. One problem is that (as of spring 2010) is that the state has not formulated secondary legislation regarding local or traditional varieties, which the Seed Law defined as “genetic resources.” The Turkish farmers’ unions protested the Seed Law on the ground that they should have the right to use their seeds, but under current practices, the private sector views farm-saved seed as competition. Another problem is that due to the physical characteristics of self-pollinating crops such as wheat, farmers often save, exchange, or sell their harvest from re-sown seeds—which may not be in the National Seed List or the European seed catalogue. Such practices require other measures, including farmers’ declaration of crops and on-farm monitoring, for which the
Turkish state partially introduced measures such as making it compulsory for small farmers to provide accounts to the breeders about what seed they saved.

4.4.3. Regulating use of naturally occurring plants: property rights meets biodiversity conservation

Finally, global seed regulation also targets collection and utilization of naturally occurring plants and associated benefit sharing. Such regulation centrally raises questions about conservation and its articulation with commercialization, privatization, and progress. Traditionally, genetic resources have been considered common resources and were freely moved around the world (Juma 1989). In the face of increased use of plants in pharmaceutical research and biotechnology applications, and the transfer of wealth associated with such use, many developing countries have been pushing for explicit rules on the use of naturally occurring organisms for plant breeding and on sharing benefits from such uses (Bragdon et al 2008). These concerns precipitated ongoing debates within the FAO that led to the ITPGRFA, and such concerns have been crucial in the design of the centrally important 1992 Convention on Biological Diversity (CBD). For many developing countries, underlying their involvement in the CBD was a desire to control access to biological resources in order to capture the benefits from the use of these resources (Glowka 1998). One outcome of contentious debates is that the CBD recognizes sovereign rights of nations over biodiversity, a provision that is often interpreted as a form of exclusive control and ownership. Although there are no articles in the CBD that directly address agricultural biodiversity, certain of its provisions are
directly relevant, including those on access to genetic resources and benefit sharing, traditional knowledge, innovations and practices, technology transfer, and implementation, compliance, and enforcement. Accordingly, the CBD encourages the fair and “equitable sharing of the benefits arising from the utilization of” plants, based on prior consent and mutually agreed terms among states (or between companies and states). Article 8.j. of the CBD, on in situ conservation, extends benefit sharing to indigenous communities and utilization of their knowledge, a provision that could enable an acknowledgment of farmers’ contribution to knowledge about seeds (Tansey 2008; Bragdon et al 2008). Despite the strength of the CBD on control and benefit sharing, it is vague about its compatibility with other international mechanisms. One question is about the relationship between the CBD and the WTO TRIPs Agreement, which has caused concern among developing countries about the possible misappropriation of their genetic resources (Tansey 2008; Bragdon et al 2008). Despite official statements that the TRIPs Agreement and the CBD have different, non-conflicting objectives and purposes, the TRIPs Agreement fails adequately to take into account prior informed consent and mutually agreed terms when it comes to accessing biodiversity-related resources for use in patentable products and processes as defined by the CBD (Council for TRIPS, 2002; Roa-Rodriguez and van Dooren 2008). Moreover, the generality of the CBD’s language also creates ambiguities. First, it may create a tendency for the commercialization of genetic resources especially through bilateral arrangements ranging from bioprospecting initiatives of international organizations to alliances between companies and universities (Kloppenburg 2004). Second, under the FAO’s ITPGRFA and its multilateral system of
access and benefit sharing, genetic resources for food and agriculture are treated as pools and not subject to CBD provisions. However, the distinction between what constitutes the use of genetic resources for food and agriculture and what constitutes other purposes is not clear (Tansey 2008).

In Turkey, these tensions between conservation and development manifest as the simultaneous recognition of the value of biodiversity and failure to take necessary steps to protect it. Proud of its biological diversity and declaring it in every possible venue, Turkey became one of the first signatories of the CBD and prepared a National Strategy and Biodiversity Action Plan in 2001. Although the Action Plan assigns high priority for in situ and ex situ conservation, it did not establish any national targets for specific programs for agriculture and conservation of agricultural biodiversity (Action Plan 2001). Interview respondents noted that as Turkey does not legally define and recognize any indigenous or local community in its national legislation, it hesitates to provide any incentives for farmers’ varieties or to design specific programs for the conservation of traditional or indigenous knowledge. Tensions between economic and environmental objectives that led to the design of the CBD also bring about a dichotomy between development and biodiversity and the unwitting embrace of progress. One state official argued that “as a result of changes required for development, biodiversity erodes. You can only find farmers’ varieties in places where mechanization in agriculture has not occurred yet”. Such claims create justifications for *ex situ* conservation over conservation by farmers. A state official who is also responsible for the National Biodiversity Program stated that as a “positive aspects of development… Turkey is one of the first countries to
have established a gene bank” and argued that having established ex situ conservation before mechanization has totally eroded biodiversity counts as a merit.

Similarly, the discourse on progress to increase agricultural yields overshadows the conservation agenda. When asked why farmers’ varieties are lost, a state official focused on the need to develop new varieties suitable for mechanization in agriculture (e.g. varieties uniform in height and density). Harmonizing regulations and other standards with the rest of the world is perceived to be crucial for progress and for the Turkish economy to compete globally. As one economist at a well-regarded Turkish university responded, “it is true that Turkey’s agriculture is restructuring…What matters is the pace of the change rather than what influences it, as the goals of the processes of the World Bank, WTO and EU are all the same: to increase the competitive power of agriculture in the world.” Another interview respondent emphasized the need to “accept certain rules,” an idea that parallels official statements that Turkey should “adapt to international competition conditions” to benefit from opportunities in the global economy (Turktarim 2007). Such discourses on “improving the competitive power of Turkish agriculture” (Turktarim 2006) underpin nondiscursive actions, including restructuring institutions such as the Grains Board. However, rather than reflecting room for maneuver that arises in the context of contradictions within global governance, seed regulation harmonization in Turkey seems to be an ensemble of discursive and nondiscursive elements continuing the trend toward privatization and commercialization of seeds.
4.5. **Conclusion**

This chapter has shown that as a biodiversity rich country, Turkey has the opportunity to develop its own system of seed governance and regulation of plant resources. Global regimes regulating commercial seeds, farmer-saved seeds, and naturally occurring plants overlap in ways that are at times complimentary, but are often contradictory. There are also explicit measures in some global regulations allowing individual countries to create sui generis systems of governance. However, rather than using this room to maneuver, Turkish state officials treat seed regulation as a monolithic process and treat harmonization as the only possibility for the future of Turkey’s seed sector. The Turkish state has not used the slippage and complexity associated with global seed regulation harmonization to balance the needs of development, conservation, and global integration. Rather, the particular discourses internalized by the political, social, and economic elite led to creation of particular forms of knowledge and actions for further privatization and commodification of plant resources. Although there were protests against the 2006 Seed Law, many of the protests failed to analyze the general context of seed related changes in Turkey, such as privatization of state owned agricultural research institutes that are responsible for breeding and distribution of crops, or reorganization of the Turkish Grains Board that is responsible for purchase of grains. This failure indicates the difficulties in situating the Seed Law in broader socio-economic contexts and nation-state priorities for development.

As the Turkish case shows, emerging regulatory regimes are not simple reflections of a unified global policy, but instead reflect the intersection of conflicting
motivations of international organizations and the nation state, especially in terms of trade, development, and conservation. International organizations have various motivations and interests, from the CBD’s emphasis on conservation to the WTO’s emphasis on establishing a uniform legal and policy infrastructure in each member country. Seed regulation gains complexity when different international agreements and organizations address the same issue, as with seed saving by farmers, and particularly when they address controversial issues, such as use of commercial varieties for plant breeding. Further, nation-states have their own interests, which are not separate from global or regional pressures but which cannot be subsumed by them. In Turkey, modernization of agriculture has long been seen as a mechanism of progress, and there is a long history of seed regulation in the country. The states’ own project of modernization and Europeanization intersect with international pressures in unique ways. Thus, attempts to understand emerging regimes of seed governance in developing countries must be attentive to the intersecting commitments of developing states to different organizations and their own different goals in terms of economic development, global integration, and conservation of natural resources.

Ultimately, this analysis provides new insight about why contemporary global seed governance has failed to create a blueprint model for seed policy development in developing countries, (Louwaars 2002) even as the goal of harmonization is to standardize trade, use, and production of seeds. The quest for a blueprint is based on a simple causal understanding of global processes and environmental governance, in which global integration leads to homogenization and standardization. Instead, we see that seed
regulation is a heterogeneous ensemble of both discursive elements, especially regarding the link between property and progress, and nondiscursive elements such as active privatization of the seed industry. As such, seed regulation is the product of an open-ended process of strategic elaboration among multiple and competing constituencies involved in trade, agriculture, development, and conservation. Indeed, developing countries that are in the process of harmonizing seed regulation are likely to experience challenges during the implementation of such regulations, especially in relation to power struggles within the state and uneven power dynamics between the state and international organizations. As in Turkey, such struggles can manifest themselves as protests raised against new Seed Laws, conflicts between the private seed sector industry and nonprofit organizations, or contradiction between different departments of the state pursuing different goals simultaneously. Moreover, being attentive to uneven power dynamics and situating seed regulation within political and economic contexts facilitates an understanding of nuances in seed regulation in different developing countries. This understanding provides insight into why many countries established Seed Laws before the deadline defined by the WTO, or with measures that are more strict than those prescribed by TRIPs. It seems that instead of yielding harmonized regulatory regimes, harmonization as an open-ended process of strategic elaboration yields a range of diverse outcomes, but that these outcomes often come together around dominant notions regarding the relationship between seed governance, agricultural modernization, and national development.
Chapter 5. Markets for Agricultural Biodiversity: The Development of Livelihoods and Conservation of Nature

For the last two years, einkorn is sold in the markets at the same price as rice. In the past, we used einkorn mainly as animal feed and ate it ourselves at home. Now, the city dwellers also eat einkorn (Personal Communication, E13, 2009, Kastamonu).

When I was growing up, we used to eat Zeron, a wheat variety that loves high altitudes. Zeron would have grains as heavy as bullets. Now we do not have it. Maybe it has become one of those high yielding, partially improved varieties. Zeron would not yield “one to forty”, forty grains per one seed, but farmers would always cultivate it for flour and bulgur. When the grains were taken to the markets after harvest, all traders would want to purchase Zeron. It would be a little more expensive than other wheat but you would not find a grain more beautiful than Zeron if you traveled the whole world … Zeron had high gluten and made good dough. That’s why we chose our seeds from Zeron, a wheat variety with a strong essence (Berat Demirci, from Taşfırın Kadınları, Women Strong as Stone).

Markets will, by themselves, result in the right amount of use or conservation of biodiversity-related resources when the market can be made to reflect the full (including public) value to society of these resources (OECD 2004).

…if farmers would spend less time on the field and more time marketing, they would make more money for themselves than they would out in the field. (Muhlke 2010)

5.1. Conundrums of Markets and Agrobiodiversity Conservation

On a hot July morning in 2009, I was driving on the tractor of Dinc, a forty-three year old farmer in Ihsangazi, Kastamonu, to join his family during the einkorn wheat harvest. Dinc, a miller who processes einkorn into bulgur and sells it at the markets, was one of the first farmers to start einkorn harvest that summer. Due to rains during the previous days, wheat ears were still damp. However, Dinc did not want to wait too long.

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2 Bulgur is a quick form of whole wheat that has been cleaned, parboiled, dried and ground into small particles. Although it is similar to cracked wheat in nutrition and texture, it is different as it is precooked during soaking and parboiling process (Wheat Foods Council 2010).
as harvesting at the right time would mean a perfect bulgur product, and if he waited too
long, many of the kernels would fall off and he would lose some of his harvest. Dinc had
a scientific approach to einkorn cultivation from the preparation of seedbeds to his
approach to harvest, which he proudly told me increased the price of bulgur at the
market. “My clients only buy from me because they know the bulgur is clean and of good
quality. I know how to prepare the fields and when to harvest, which makes a good
product.” While I was visiting his field, his brother, parents and two teenage children
were all working to prepare the field for shearing to start the harvesting (Figure 5.1).

Figure 5.1. Traditional wheat variety harvest in Ihsangazi, Kastamonu
Before connecting his tractor to the shear machine, Dinc showed me the nearby two plots connected to his field and said he purchased them in the last two years to grow einkorn. Dinc’s father intervened to tell me that his family used to grow einkorn when he was a child, but they eventually cultivated less and less to the point where almost nobody in the village grew einkorn. “Things started to change four or five years ago,” he added. “Now we can sell it and can make good money.” His family exchanged remarks about the possibility of purchasing another plot at the end of this harvest season, since it would be another year of “good sales.” When I asked how they predict good prices for einkorn at the markets, Dinc said, “It will sell at a good price. Otherwise, you would not come here all the way from America.” If a predicted increase in Dinc’s wealth seemed strange considering the global economic crisis, and a national agricultural restructuring program that aimed to reduce the agricultural population, it became more interesting to find that he was not the only farmer who had hope about his future and that of agriculture in his village.

Two weeks later in Ulaş, Sivas, I was having lunch with a retired teacher—an educated urbanite who returned to live in his hometown. A man in his late-fifties with grey hair, Hoca was the president of a local development non-profit organization. He told me about the outcomes of meetings with an organic certification company and with state officials in Sivas, regarding subsidies on organic agriculture and potential buyers for zerón, a traditional wheat variety. He was speaking fast and I had difficulty keeping up with the figures he threw at me. Did he just say he registered 80,000 decares (almost 19,770 acres) of land from Ulaş for the organic agriculture state subsidy in the summer of
2009 alone, and that 20,000 decares (4,942 acres) of this would be just for zeron, cultivation? As he busily ate his food, he introduced me to another farmer who came to talk to him about the results of his meetings, and to ask whether his application was accepted. One of the four hundred applicants for the state subsidy on organic agriculture around Ulaş, this farmer Muhtar was also interested in expanding his lands under organic wheat cultivation. He previously cultivated the traditional variety for household use only, but grew interested in expanding production as he witnessed his neighbors become contract farmers over the last five years to grow the variety for a company based in Istanbul. When asked why he wants to expand cultivation now, Muhtar did discuss traditional wheat specifically, but enthusiastically told me that organic agriculture was good for his bees, and that he could not afford to buy fertilizer and agricultural chemicals in the last two years anyway, referring to the increase in the cost of inputs for agriculture under a neoliberal economy.

Until about forty years ago, people in Turkey grew hulled wheat for food: emmer for making bread and einkorn for household bulgur consumption. Today, einkorn is mainly used for animal feed as raising livestock provides a better livelihood than crop cultivation for the markets (Biodiversity International 2006). There has been a sharp decrease in hulled wheat cultivated areas in Turkey in the second half of twentieth century. The total acreage in 1992 was about nine percent of the area cultivated in 1953 (Karagoz 1996; Unal 2009). However, research findings confirm an expansion of areas cultivated with einkorn especially in Ihsangazi, Kastamonu, in the last three years.
(Ihsangazi Kaymakamlığı 2008), whereas *emmer* has been almost abandoned in many of the villages. What factors have led to the revival of einkorn in Ihsangazi, Kastamonu?

Another puzzle emerged in Sivas. Earlier studies on Sivas confirmed the existence and wide use of a traditional wheat variety (Meng 1997; Kruzich 2006). An agrobiodiversity survey team found an abundance of *zeron* in the villages of Gürün in 2004, and noted a few cases of the crop being grown around Ulaş, suggesting its continued household use (Personal Communication, SO2-1, 2007, Ankara). However, the study I carried out in the summer of 2009 found that the traditional wheat variety *zeron* disappeared almost entirely from Gürün whereas it is now prominent in the villages of Ulaş, 100 kilometers (60 miles) from Gürün. What has changed in Ulaş and Gürün since 2004? Why did the farmers of Ulaş decide to cultivate *zeron* again whereas the farmers of Gürün abandoned it? In this chapter, I aim to demonstrate the complex effects of market mechanisms for agrobiodiversity conservation and livelihoods.

5.2. Vantage Point

The literature on agrarian change suggests that agricultural modernization and market liberalization have significantly changed the social processes that maintained wheat diversity in Turkey (Aydın 2002; Oyan 2002). An increasing number of smallholder wheat producers are adopting alternative livelihood options, including temporary or permanent migration, and are revising their income options to align with shifting standards on crops, agricultural support and marketing mechanisms. These changes do not mean that farmers everywhere are diversifying their livelihoods or leaving
agriculture. The literature has also documented that farmers have developed mechanisms to adjust to the consistent imperative that runs through the history of capitalism, and its current form neoliberalism, which is the expansion of opportunities for capital investment and accumulation (Heynen et al. 2007; Bebbington 2002). Yet, the current conjuncture of economic policies that propose markets as the solution to conservation and development presents complex and contingent outcomes for agrobiodiversity conservation.

The role of markets on the conservation of agrobiodiversity on the farm, and enhancement of livelihoods, is a contested issue. Some scholars argue that economic development in terms of increased access to input and markets has the greatest impact on the net loss of diversity (Smale and King 2005; Bellon 2004; van Dusen and Taylor 2005). However, farmers’ agrobiodiversity choices reflect a number of factors aside from market prices that determine agrobiodiversity conservation outcomes. Agrobiodiversity conservation in situ on-farm context is dynamic, and farmers’ methods and crop choices are varied. This chapter discusses farmers’ responses to current neoliberal structuring in research sites in Turkey in order to address three questions: why are farmers still cultivating traditional varieties? Which actors or factors create markets that influence on-farm biodiversity protection? How do markets affect farmers’ decisions about management of agrobiodiversity assets and livelihood security?

The data for this chapter comes mainly from primary sources, collected during ethnographic work in research sites of Kastamonu and Sivas, Turkey, in 2007 and 2009. Current market-related changes in agrobiodiversity conservation intersect with issues of increasing commodification of nature, and conservation and development practices.
Through analysis of the data collected, I highlight the effects of market-based mechanisms on conservation and development practices, and on access to natural resources and livelihood strategies. I also examine farmers’ responses to external factors (i.e., agricultural restructuring and international funding opportunities) in one district, Ihsangazi, in Kastamonu province and two districts, Gürün and Ulaş, in Sivas province.

By situating an analysis of market mechanisms within the development and conservation dynamics of each research site, I argue that market-related mechanisms are important for agrobiodiversity conservation, but alone are inadequate for the conservation of traditional varieties. First, markets are not established by an invisible hand, but rather interventions are needed at multiple scales to create or strengthen markets for agrobiodiversity (Guiliani 2007; Pascual and Perrings 2007). Thus, assumptions about neoliberal markets that a market system is an economic system controlled, regulated and directed by market prices (see Polanyi [1944] 2001) do not hold because market mechanisms are not based entirely on individual actions. Second, the existence of market mechanisms alone do not guarantee the conservation of traditional varieties (Hellin et al 2010), as market mechanisms are grounded in social, geographical, political and environmental contexts, and are complicated according to local factors. Third, in situ conservation of crops is an open process that involves farmers’ agency (See Perales et al 2003). This means that specific market-driven interventions designed to influence farmers’ management of agrobiodiversity may not cause the predicted conservation outcomes, whereas farmers may articulate their interests through different interventions at multiple scales and engage in conservation-oriented programs.
I organize this chapter into four sections. First, I discuss how market-oriented frameworks for agrobiodiversity conservation emerge. I argue that markets for traditional varieties emerge as a result of direct marketing methods, such as the creation of niche markets that aim to increase the exchange values of traditional varieties in the market, or as an extension/unintended consequence of development and conservation interventions at multiple scales. Second, I discuss the multiple factors determining why a household decides to grow traditional varieties. Farmers emphasize the non-monetary values of traditional varieties, such as nutrition and culture, but they also appreciate the increased exchange values for traditional varieties in the markets. Third, I trace the initial effects of the establishment of market mechanisms and increasing consumer demand to cultivation of different varieties. The effects are diverse: In both Gürün, Sivas, and Ihsangazi, Kastamonu, increased demand for a certain variety with guaranteed markets and high prices increased farmers’ cultivation of the area sown with that variety. However, whereas farmers of Gürün, Sivas totally abandoned the traditional variety in favor of a folk variety (improved from the traditional variety), the farmers in Ihsangazi, Kastamonu, were able to revive the traditional variety. Fourth, I analyze development interventions at multiple scales and their connections to conservation. I argue that market mechanisms are dependent on interventions at multiple scales from development and conservation organizations and the state. This dependence can be in the form of funding, manipulation of consumer demand or subsidies for production. I conclude that agrobiodiversity conservation’s on-farm context is dynamic as it depends on regular shifts in farmers’
methods and crop choices, and it presents an important case-study for tracing the resilience of both nature and livelihoods under neoliberalization processes on the ground.

5.3. Market-Oriented Methods to Conserve and Enhance Agrobiodiversity

Market oriented methods for agrobiodiversity conservation are efforts under neoliberalization to valorize nature within economic renderings of accounts, so that agrobiodiversity becomes internal to, and managed through, market processes (Hayden 2003). This approach promises market solutions to environmental problems based on privatization and monetary pricing of nature. The basic assumption is that whatever the state does, markets can do better (Zerner 2000; Hellin et al 2010). Proponents of market-oriented agrobiodiversity conservation claim that if, for instance, ecosystem services provided by agrobiodiversity can be effectively valued by market mechanisms, both genetic erosion of agrobiodiversity concerns and inefficient use of resources will be addressed.

Valorization of agrobiodiversity reflects the perception of nature as an enterprise, which places biodiversity firmly under the conventional economic agenda. This mainly came in 1992 with the UN Convention on Biological Diversity (CBD). It was a modification from “traditional nature conservation,” a defensive effort protecting nature from the impacts of development, to “biodiversity conservation,” an offensive effort seeking to meet people’s needs through biological resources while addressing the long term sustainability of those resources. Such efforts make biodiversity’s specificity as a kind of nature with particular kinds of value attached, turning it from a diverse array of
genes, species and ecosystems to a resource that can be tapped as human needs and demands change (Hayden 2003). These efforts intensify nature’s commodification under neoliberalization, extend market mechanisms to conservation and extend market oriented livelihood development approaches. Thus, conservation and development programs at national, regional or international scales promote markets for agrobiodiversity conservation\(^3\) and preservation of traditional livelihoods. Two methods I elaborate here are the creation of markets for agrobiodiversity and the expansion of market mechanisms into development and conservation programs.

5.3.1. Creating Markets for Traditional Varieties

Market mechanisms for agrobiodiversity conservation involve the marketing of traditional varieties as consumer goods, the introduction of legal mechanisms to restrict the supply of genetic resources to increase their value for sale as genetic resources, and the introduction of market-incentives for agrobiodiversity services. These mechanisms aim to increase direct use values, or the harvest and use of different crop varieties for commercial, non-commercial or industrial production. They may also focus on option values, or the value derived from the future use of the resources (Brush 2000). Many farmers in the developing world are already connected to markets. Although they grow traditional varieties primarily for household use, many have started to bring their local or

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\(^3\) Several market-based mechanisms that aim to enhance the use and conservation of agrobiodiversity are similar to those mechanisms applied in biodiversity conservation. These can be categorized as 1) Market price approaches, 2) Revealed preference approaches, 3) Stated preference approaches, 4) Benefits transfer approaches (See OECD 2004). These methods, alone or in combination, can be used to develop mechanisms like direct compensation payments, land use development rights and auctions for biodiversity conservation to improve the use of agrobiodiversity and its valuation (Pascual and Perrings 2007).
traditional crops to local and national markets for sale, often in the informal sector (See Brush 2000; Hellin et al 2010). Studies have demonstrated that the urban demand for health and minimally-processed food and the consumers’ willingness to pay higher prices for traditional varieties have contributed to such marketing mechanisms in different parts of the world.

Direct marketing of agrobiodiversity as consumer goods includes different methods, such as green marketing, the encouragement of niche markets and market-chain coordination. These methods can be used alone or together to make traditional varieties marketable products. The first method, green marketing, involves marketing agrobiodiversity for environmental, human and other social causes, through standards systems including eco-labels (e.g. organic, fair trade) and Geographical Indications (GI) (Lockie and Carpenter 2010). These methods have proved to be successful to support public causes as, through certification, the product is identified with particular qualities of consumer interest. Certification relies on “legal enforcement, on market demand, and willingness to pay additional costs for the guarantee of the appellation” and local farmers and farmers’ organizations can participate in monitoring and evaluation routines that accompany certification (Brush 2000: 19). The certification system is well developed in Europe, and it is associated with high quality food products. The GI used to protect names such as Roquefort or Camambert is also used to promote agrobiodiversity products, as it speaks to a sense of place and authenticity that goes beyond the product’s immediate and unique agroecological production circumstances (Thevenod-Mottet 2010).
A second method is the creation of special niche markets, which can be identified in areas where traditional varieties are in demand but where there are constraints to the market, such as lack of transportation or storage facilities for traditional varieties. The conservation or development programs that aim to address these constraints can promote in situ conservation projects by supporting facility construction and promotional campaigns for traditional varieties products (Brush 2000).

The third method is market-chain coordination of neglected and underutilized plant products, which aims to increase farmer access to markets. Underutilized crops, such as cultivated einkorn, are minor in global production and market value terms when compared with other major staple crops (e.g., modern wheat varieties) and agricultural commodities. However, they are “valuable” due to their adaptability to agro-ecological niches and marginal areas, reflection of traditional knowledge, and significance to local livelihoods for income or cultural reasons (Guiliani 2007; Hellin et al 2010). The goal in market-chain coordination is to stimulate market demand by focusing on the intrinsic properties and nutritious qualities of such products (e.g., emmer of Italy, Andean grain quinoa) or making it a fashion (e.g., Syrian wild laurel soap in European markets). By defining the interaction and linkages of actors at each step of the production system, from producer to consumer, market-chain coordination aims to integrate poor people into markets through a focus on both constraints and opportunities in the chain, diverse dimensions of poverty and multiple strategies to adopt secure livelihoods (Guiliani 2007).

While increasing the market access of traditional varieties has great potential to contribute to agrobiodiversity conservation and farmers’ livelihood security, scholars
have also pointed out that market forces alone cannot address conservation of agrobiodiversity. Market mechanisms do not address power relations in these markets, who can buy and to where the money flows back. Through the study of high-value fresh food commodity chains, Freidberg (2004) argues that consumer buying power in the global North offers modest economic gains for peasant producers and farm laborers in the Global South. Similarly, while Geographical Indications and similar eco-labels often generate higher economic returns in recognition of particular practices and product qualities, standardized compliance checklists cannot completely address complex sustainability issues (Lockie and Tennent 2010). Geographical Indications require collective action but individual households have various interests that may prevent them from acting collectively (Thevenod-Mottet 2010).

Market mechanisms can also pose possible threats to the same livelihoods that it promises to protect (Zimmerer 2006b). Evident in the paradox of organic farming in California, organic certification has been closely linked to emergence of agribusiness firms, and not the sustainability of local farmers’ livelihoods (Guthman 2004). Other concerns about sustainability are related to the effects of market mechanisms on conservation and use of agrobiodiversity. Some successful marketing mechanisms can lead to overexploitation through extensive harvesting (harvesting from a larger area), intensified management (either in the forest or through cultivation) or intensive harvesting (harvesting more per unit of area). At the other extreme, another problem is related to quitting traditional processing mechanisms when the trade-offs become necessary to meet market demands (Hellin et al 2010). The trade-offs to increase or
standardize production also presented challenges for Ihsangazi, Kastamonu farmers who were seeking external funding to dry the parboiled wheat to produce bulgur.

5.3.2. Markets as the Outcome of Development and Conservation Interventions

International organizations and the state also affect conservation and marketing of agrobiodiversity indirectly through development or conservation programs. This interest in agrobiodiversity is related to several factors: the increased role of international organizations in conservation and development, framing of agriculture as a major conservation and development issue, the biodiversity phase of modern environmentalism, and economic globalization (see Zimmerer 2006a; World Bank 2008). Various organizations with international and global reach, such as the World Bank, United Nations, World Wide Fund for Nature, and businesses have promoted the establishment of protected areas and other conservation goals regardless of whether or not these organizations have specialized in conservation. Their activities range from the financing of protected-areas and management plans to the coordination of conservation management activities.

Turkey has also experienced increased involvement of international actors that promote the conservation of its biodiversity. Several international organizations have funded programs for sustainable biodiversity use and establishment of protected areas. Turkey’s participation in the GEF started during the GEF pilot phase in 1992 with the preparation of the In-Situ Conservation of Genetic Diversity project (GEF I), implemented by the World Bank. Since then, Turkey has been involved in an additional
ten national projects plus two national components of global projects. The Turkey GEF portfolio totals $36.33 million and an additional $82.63 million comes through cofinancing. Forty seven percent of GEF funds were invested on projects in the biodiversity focal area. Since the late 1990s various ministries coordinated World Bank-funded projects to increase soil productivity, improve agricultural production in forest villages and grazing lands and ensure sustainability with participatory rural development projects in rural areas, including at my research site in Sivas (MoEF, 2009). The most comprehensive biodiversity conservation project in Turkey, the Biodiversity and Natural Resources Management Project (GEF III) was completed in 2008 and implemented by the World Bank in conjunction with the Turkish Ministry of Environment and Forestry (Karadeniz et al 2009; GEF 2010). Currently, the Ministry of Agriculture is using World Bank funds to implement the program CATAK (Environmentally Based Agricultural Land Utilisation), to help farmers implement technologies and methods to reduce water use and increase soil quality by fighting erosion and overgrazing in two areas that include internationally recognized wetland conservation sites (ARIP 2009).

The effects of internationally funded conservation projects are complex. Besides contributing to conservation outcomes, they have created a “project making” culture, in which the foreign expert inputs and funding play a significant role in the definition and implementation of conservation measures (Tarih Vakfi 2003). The flow of external funds and the emerging project culture has resulted in the professionalization of civic activism and forging new relations between and hierarchies among civic activists. The project culture has even been criticized as a form of neo-imperialism – a threat to authentic or
local forms of civic activism (Kuzmanovic 2010). Most importantly, this culture also has created expectation of financial returns among local communities for conservation. These expectations have also been fueled through the social investment and environmental mitigation projects of private companies, often negotiated and articulated by the international organizations. For instance, BTC Co., the international consortium building and operating the the Baku-Tbilisi-Ceyhan Pipeline, which crosses Turkey from the east (Ardahan) to the south (Adana), has invested in social development and environmental mitigation projects through its Community Investment Programme (CIP) and the Environmental Investment Programme (EIP) (BTC 2008).

European Union accession is likely to have the biggest effect on agricultural economic changes, social life and conservation in Turkey. The EU provides “Structural Cohesion” funds to candidate countries to serve different goals from the development of civil society in conservation, to the establishment of environmental governance mechanisms. A reflection of these investments in terms of conservation practices is that the EU funds have been used to finance partnerships between Turkish and European NGOs for capacity building and training in conservation and have encouraged networking among civil society organizations (Harris, forthcoming). Other EU member countries, such as the Netherlands, also established cooperation programs in Turkey through the BBI-Matra (International Biodiversity Policy Program) activities since 2000 (Klok and Koopmanschap 2009). However, the outcomes of these efforts on conservation are still limited, especially due to low levels of harmonization and implementation of EU-framework law on nature protection, and lack of adoption of a
national biodiversity strategy and action plan by the government (European Commission 2008). As the EU accession process continues, it remains unclear how the EU-funded or initiated projects will integrate into the wider context of Turkey’s biodiversity conservation.

Scholars have also critiqued conservation and development based on external funding from international organizations, especially in terms of the sustainability of outcomes. Funding from international organizations is often limited to a few years, so questions about the sustainability of project outcomes beyond the term of project funding becomes an important issue among stakeholders, including state agencies, local and regional authorities, private companies and farmers. Another critique is concerned with the mismatch of relevant scale for development and conservation goals. International organizations often adopt the scale of the rural community as the spatial foundation for spreading development and conservation programs. Yet, resource user groups act at a multicommunity scale, which requires interventions at multiple levels (Zimmerer 2006a). Moreover, mechanisms for agrobiodiversity marketing intervene at the household scale to provide incentives for agrobiodiversity conservation (Jackson et al 2007). Although it is often the case that individual farmers decide to reconcile the private and social values attributed to agrobiodiversity, individual farmers cannot maintain the processes that support agrobiodiversity in isolation from other farmers. As individual households constantly evaluate their agrobiodiversity choices in line with socio-economic interventions at national and international scales, which do not necessarily involve
particular variety conservation, it also becomes crucial to analyze the effects of conservation and development interventions at multiple scales.

5.4. The Decision to Cultivate Traditional Varieties

Literature on agrobiodiversity research has documented that farmers differentiate between traditional varieties and modern varieties (Brush 2000; Meng 1997). In both Kastamonu and Sivas, farmers make a similar distinction. While they refer to modern varieties as “wheat,” they have specific names for traditional varieties, such as siyez and gabilca (T. monoccocum and T. dicoccon) in Kastamonu, Köse or Ankara zerini (folk variety) and kilçiksız zeron or zeron (T. aestivum) in Sivas. Earlier studies on the cultivation of traditional wheat varieties in Turkey found positive association between traditional wheat variety cultivation and relative isolation from markets (Meng and Brush 1998). The underlying assumption is that high transaction costs to access markets negatively affects participation in them, increases self-sufficiency in consumption and encourages traditional variety cultivation. With particular attention to household behavior, these studies conclude that households otherwise willing to cultivate traditional varieties are more likely to cultivate traditional varieties as markets becomes more expensive and less information is available (Kruzich and Meng, 2006). Although existence of markets is an important factor, farmers cultivate traditional varieties for various reasons.

In both Kastamonu and Sivas, farmers mentioned the superior quality of traditional variety einkorn and zeron in terms of taste and nutritional properties. In
discussing the health benefits of traditional varieties, one respondent in Sivas stated “If you ate bread made with zeran at breakfast, you would not get hungry until dinner and so you could work all day.” (Personal Communication, E22, 2007, Sivas). Old farmers complained about the increase of health problems in the villages due to bread with no essence made from modern wheat varieties (Personal Communication, K1, K5, K9, E7, 2009, Kastamonu): “We would never get sick. I am 72 years old but my grandchildren, ages 17 and 20, get sick more than I do.” (Personal Communication, E36, 2009, Sivas)

Farmers also mentioned resilience of traditional varieties despite unfavorable agroecological conditions (i.e., endurance to cold weather at high altitudes and drought in Sivas and regular precipitation during summer in Kastamonu). Whereas some farmers mentioned that modern varieties would often turn black before harvest due to rain in Kastamonu, others added that the traditional variety einkorn has the best performance without herbicides or irrigation, and only requires animal manure or basic cheap fertilizer (Personal Communication, E5, E7, TR-I2, 2009, Kastamonu).

In Kastamonu, where the traditional variety is mostly used as animal feed, many respondents connected the benefits of traditional variety einkorn to animal well being. Those farmers whose main source of income was animal husbandry said they grew einkorn since their grandfathers’ times for its benefits to their livestock (Personal Communication, E1, E4, E18, 2009, Kastamonu). In general, many farmers told me they use about ten percent of their harvest as seeds, then three-fourths of the remaining as animal feed, a much lesser amount for their household bulgur use, and less than five percent of the total for sale at the market (Personal Communication, E4, E10, 2009,
Kastamonu). Although many farmers used the new animal feed crop plants including vetch (*Vicia*), sainfoin (*Onobrychis*) and triticale, for which the state has provided subsidies since 2000, some farmers stated digestive problems while feeding these to their livestock (Personal Communication, K9, K11, E7, 2009, Kastamonu). Farmers also attribute a cultural value to einkorn and give bulgur made from einkorn to relatives or friends in urban areas as a gift. Some farmers later use these gift-relationships to engage in direct marketing of the bulgur (Personal Communication, K5, K9, K10, 2009, Kastamonu).

In Kastamonu, farmers acknowledged their traditional variety cultivation as beyond market valuation, since only a small percentage of their harvest is sold at markets. A woman farmer suggested that even if niche consumer markets disappear one day, they would continue to cultivate einkorn as her parents grew einkorn for animals, and her children would grow it for animal husbandry (Personal Communication, K7, 2009, Kastamonu). Especially older farmers could explain the agroecological characteristics and adaptability of einkorn at different elevations and villages, such as the strength of einkorn to various kinds of rain and the correlation between quality and elevation (Personal Communication, E7, M1, E20, K13, 2009, Kastamonu. However, as farmers who cultivate traditional varieties grow old and the younger generation seeks opportunities in urban areas, the traditional knowledge related to growing einkorn and processing it into bulgur disappears. Thus, the loss of the aging farmer population also presents a constraint for the maintenance of agrobiodiversity conservation. Yet, there are many other factors that lead to abandonment of traditional variety cultivation.
Farmers in Sivas quit growing the traditional variety zeron (mainly in the last decade) for several reasons. First, the natural characteristics of the traditional variety experienced high loss under mechanized agriculture. The majority of the wheat spikes would not be properly harvested with the combine because of shattering due to loose spikes or lodging due to weak stems (Personal Communication, E31, E33, E34, E36, 2009, Sivas). Second, traditional variety had low yields compared to modern varieties (Personal Communication, E30, E34, 2009, Sivas). Third, there were disruptions in seed networks due to the decreasing number of farmers cultivating the traditional variety, which made it difficult to find or exchange zeron seeds (Personal Communication, E29, NGO12, 2009, Sivas). Fourth, boars have destroyed zeron harvests in recent years (Personal Communication, E40, NGO13, 2009, Sivas). Fifth, a new factory that processes only one folk variety into bulgur was set up in Gürün in 2001 (Personal Communication, E32, E35, E36, E37, 2009, Sivas). Of these issues, the issues of boars and establishment of a bulgur factory are of particular interest.

The recent threat of boars emerged in relation to the state’s recent conservation policies. The state introduced bans on hunting wildlife through strict vigilance of gendarmerie forces especially in forest-villages, or villages located in or around officially defined forest areas. Many farmers complained about the increase of boars and their destruction of fields. The natural properties of the traditional varieties caused different outcomes of boar damage in Kastamonu and Sivas. The spikes of einkorn protected the traditional variety from pest attacks in Kastamonu and boars mainly destroyed corn silage, an important feed for livestock, potatoes and the most common modern wheat
variety. By contrast, the traditional variety *zeron*, which lacked spikes, could not endure against boars in Sivas (Personal Communication, E29, E40, NGO13, 2009, Sivas).

The establishment of a bulgur factory in Gürün, Sivas was crucial for the shift in cultivation patterns. The factory decided to purchase only the folk variety *Köse*, a wheat variety developed from the traditional variety *zeron* by the state sometime in late 1960s, and distributed mainly in Gürün. Promotion of its cultivation was abandoned by the state about 25 years ago, according to various accounts⁴. A local businessman in his late forties mentioned that he decided to purchase only this folk variety because of demand for the processed *Köse* bulgur in local markets in Sivas and its surrounding areas due to familiarity with the taste. He was happy with his sales, and he suggested he did not need to manipulate consumer demand for the sustainability of markets. The factory recruited farmers to propagate quality folk variety seeds and distributed these seeds to farmers (Personal Communication, TR3, 2009, Sivas). Many of the farmers in Gürün, and others in close proximity to the factory, extended the area they cultivate for the folk variety. Gürün farmers abandoned not only traditional variety *zeron*, but also the modern wheat varieties, and now cultivate only the folk variety (Personal Communication, E36, E37, E39, 2009, Sivas) (Figure 5.2).

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⁴ During the interviews with state officials, agricultural research institute staff and farmers, I could not confirm the exact years of introduction or the date of abandonment.
Figure 5.2. Bulgur from folk variety, Köse, marketed as “Gürün” bulgur in Sivas.

5.5. Establishment of Markets and Consumer Demand

Markets mechanisms in agrobiodiversity conservation work in complex ways as various factors lead to the creation of consumer demand. Marketing of agrobiodiversity requires initial intervention at the local scale or multiple scales to create or strengthen consumer demand. The need for external economic output or manipulation can be little, yet the success of marketing mechanisms still rely on the concerted involvement of various actors at different scales that manipulate markets. However, consumer demand alone and guaranteed prices does not translate into conservation outcomes. Farmers also take into consideration other factors, such as transportation costs, or direct cash returns.
over short time periods, that promote their choice to cultivate certain varieties over others (Personal Communication, E34, E35, K16, 2009, Sivas). Changes in market conditions can occur gradually or abruptly, and do not guarantee conservation outcomes.

The shift to a “folk variety” (Berg 2009) or “peasant variety” (Bocci and Chable 2008) in Gürün due to the establishment of the bulgur factory was an abrupt change. Before the factory started to operate in 2001, farmers in Gürün, had difficulties marketing the folk variety at the local and national markets due to transportation costs, market expectations and market valuation of high yielding varieties at a better price. They cultivated the traditional wheat variety, zeron, mainly for household use. Problems with state purchases and minimum price guarantees discouraged farmers from growing both the traditional variety and the folk variety. Moreover, they had to pay for their transportation costs to the state owned Turkish Grains Board office in a nearby district, Kangal, about 50 miles from both Gürün and Ulaş. The Grains Board offered low prices for the folk variety, Köse, as it was not categorized as a modern variety, but as animal feed. Many farmers stated that they preferred to sell their Köse harvest to local traders who would purchase below state-defined prices but transport the grain themselves (Personal Communication, E26, K16, 2009, Sivas). Establishment of the factory in Gürün now means stable incomes for farmers who grow the folk variety, as the factory pays about 10-15% above market prices for quality Köse, transports the grain itself, and makes payment in a considerably shorter time period than other traders or the state.

The factory in Gürün also manipulated the markets through its advertisement of “the Gürün wheat.” As farmers began to sell the folk variety to the factory without
problems, other farmers in Gürün quickly shifted to cultivation of the folk variety as they were already familiar with its cultivation. The farmers also mentioned increased costs of agricultural inputs, especially seeds, as a significant factor in their decisions to grow Köse. Modern wheat varieties also cultivated by these farmers required seed renewal up to every three years, but many farmers indicated they could not afford modern variety seeds (Personal Communication, E28, E34, E35, 2009, Sivas). Other factors that affected farmers’ decisions to focus on cultivating the folk variety in Gürün were agricultural restructuring in the last decade, such as significant reductions in state support for agricultural inputs, increasing dependence on credits, and foreclosures on farm equipment due to loans not paid back to the state (Personal Communication, E22-2, M3, E28, E32, 2009, Sivas). Under such negative economic conditions, the availability of the market for the folk variety in Gürün became the main factor on farmers’ decision to cultivate that variety.

The effects of markets were more gradual in Kastamonu. Einkorn bulgur is appreciated by consumers in rural areas in Kastamonu where bulgur is an everyday dish (Figure 5.3 next page). Recently, this variety has been marketed in urban markets in Kastamonu and at national scale due to increased appreciation among urban people and migration links to Istanbul, the most populous city and financial capital of Turkey. The current awareness about the nutritional properties of einkorn, confirmed through recent research, has overlapped with the trends for organic, healthy, local and minimally-processed natural foods (Bioversity International 2006; Guiliani et al 2009). Einkorn has been promoted as a tasty health food at national markets by various actors (local business
associations, nonprofit groups, nutritionists and gourmet food writers), and through various media (local and national food festivals, cooking shows on national television, cookbooks). Yet, these efforts to create einkorn markets are scattered, neither focused on manipulation of consumer demand at a wider scale, nor on provision of quality high volume bulgur to the markets.

Figure 5.3. Einkorn bulgur with local herbs served at a local food festival, Kastamonu
The market prices for einkorn bulgur have especially increased over the last three years. This has affected both the amount of land under einkorn cultivation and also the amount of bulgur sold in the markets. Some farmers stated that even until two years ago, they sold einkorn bulgur to retailers for 1 YTL (0.9 USD), compared to 3 YTL in 2009 (2.2 USD). Direct sales increased significantly in recent years. Dinc, one of the main millers and farmer-traders in Ihsangazi, told me that he sold forty times more in 2008, four tons of bulgur than he sold in 2006, which was only 100 kilograms (Personal Communication, TR-I2, 2009, Kastamonu). Increasing consumer demand in local markets and higher market prices encouraged more farmer-traders and traders to market einkorn bulgur. Some farmers started to grow einkorn on land that they usually set aside for barley or modern wheat varieties, while others purchased more land to cultivate einkorn (Personal Communication, E6, E7, E19, TR-I2, 2009, Kastamonu).

However, uncertainties about the future of einkorn bulgur marketing and the prices received by farmers in Kastamonu are apparent. One local official, who grew up in another province, suggested there could be problems marketing domestically: “The taste of einkorn bulgur is very different than traditional bulgur. We do not consume it in our house. Perhaps foreign consumers will like it.” (Personal Communication, SO13, 2009, Kastamonu). For farmer-traders who grew up in Ihsangazi, there was no problem with marketing einkorn locally. Dinc, the male farmer-trader and miller, suggested that the problem was not about physical availability of markets but determination of prices in those markets:

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5 As I write this dissertation, food prices in Turkey are at record high. A kilogram of rice grown in Turkey sells for 5 TL, and the rice imported from Pakistan sells at the markets for 2 TL.
Experts [from the German Cooperative Union] came and said it would be better if we could market beyond Kastamonu. We already send some bulgur to Istanbul, to those who migrated from Kastamonu. We can expand the local market at the national level to Ankara … I sell directly at the weekly farmers’ markets in Kastamonu, or door-to-door. I sell my entire product. However, wholesale businessmen come from [other districts of Kastamonu] and purchase bulgur. The price of einkorn bulgur is in the hands of these five to six wholesale traders. Right now, they pay the farmer 3 TL for a kilo of bulgur, but after the harvest in a few weeks, they will not even pay 2 TL. They decide when and at what price to sell (Personal Communication, TR-I2, 2009, Kastamonu).

Such accounts reveal more ingrained problems in the marketing system and raise further questions about access to markets. Not all farmers have access to the markets as traders. Moreover, manipulation of consumer demand alone in newly created markets for agrobiodiversity cannot address the social injustice problems grounded in the economic system as to where the profit from the traditional variety products flow.

Markets also require clean and standard products, and there have been problems with delivering standard einkorn bulgur to the markets. The production of bulgur is labor intensive and dependent on natural conditions. During interviews and focus groups, farmers responded that making bulgur from hulled wheat is done in several steps, including boiling, drying the grains, taking them to millers for dehulling, and getting the final bulgur, which takes about four days of intensive work (Personal Communication, E7-2, E13, E19, K4, M1, 2009, Kastamonu). The preparation of bulgur continues from the end of harvest in August until October. The drying depends on weather conditions as boiled grains are placed under direct sun. To standardize production and increase the quality of einkorn bulgur, local stakeholders suggest alternative drying mechanisms. However, as they do not have capital, they seek external funding, which creates further
uncertainties (Personal Communication, NGO6-1, 2007; NGO6-2, NGO10, 2009, Kastamonu).

5.6. Development Interventions At Multiple Scales And Revival Of Wheat

Traditional Variety In Ulaş

Farmers’ responses to market mechanisms are a dynamic open process, reflecting the contingency of internal factors (farmers’ interests and perceptions), and external factors (interventions by international institutions or private companies). In Ulaş, Sivas, the shift to cultivation of the traditional wheat variety zeron coincided with shifts in the state’s subsidy to organic production. The presence of a range of external factors, including organic contract farming through an Istanbul-based private company, Istanbul Halk Ekmek (Istanbul Public Bread Company-Istanbul company from now on), the extensive support of national nonprofit organizations in terms of technical knowledge, capacity building and funds and international funding for community development have also helped to shaped farmers’ decisions on cultivation of the traditional wheat variety (see Figure 5.4).

Ulaş farmers started organic farming practices in 2005, mainly due to the contract farming practices of the Istanbul Company. The Istanbul Company, a private company owned by the Istanbul Metropolitan Municipality, administered the project to “Reverse Migration” with funds received from the European Commission. Through the project, the Istanbul Company contracted 1,200 farmers in the eight provinces that have sent the most number of migrants to Istanbul, and which have the lowest level of economic
development (Personal Communication, PR1, 2009, Ankara). The Istanbul Company provided twenty to forty percent above market prices to farmers they contracted for organic wheat. The Istanbul Company’s choice of farmers raises three questions: How did the company choose which farmers to contract? How could farmers start production without a transition period of often two years (and in some exceptions only one year) required for organic farming certification? How did the Istanbul Company decide which wheat variety to buy? First, the Turkish state indirectly contributed to decision making about who could participate in the Istanbul Company’s organic contract farming. The Istanbul Company started to contract farmers who grew animal fodder in their fields through state subsidies in the previous three to four years. As a result of the growing practice of vetch and sainfoin, farmers did not use any agricultural chemicals in their fields. Second, the Istanbul Company allowed farmers to choose their own wheat variety. By acknowledging the high qualities of the traditional wheat variety zeron in bread making, the Istanbul Company indirectly encouraged the farmers to grow the traditional wheat variety. The contracted farmers in Ulaş decided to grow the traditional wheat variety zeron. However, the Istanbul Company’s recognition of the traditional variety alone, which refers to interactions at local, national and international scale, does not determine the farmers’ decisions which wheat variety to cultivate.
Figure 5.4. Information and Financial Networks Between Local Farmers and Interventions at Multiple Scales
The Istanbul Company’s knowledge about the traditional wheat variety highlights the connections between different development and conservation interventions at multiple scales. The Istanbul Company started its first organic farming contracts through a local nonprofit organization, DAPHAN in Erzurum, eastern Turkey. DAPHAN has implemented organic farming and organic animal husbandry projects with European Commission funding since 2003 and a Sustainable Organic Wheat Production project with traditional varieties in 2004 through the Environment Investment Program of BTC Co., along the Baku-Tbilisi-Ceyhan pipeline route. It is important to note that Environment Investment Program of the BTC Co. did not cover agrobiodiversity conservation specifically (Klok and Koopmanschap 2009). DAPHAN also established connections with the Sustainable Rural and Urban Development Association (SURKAL), the national nonprofit organization that implements a rural development program in Sivas through the Community Investment Program (CIP) of BTC Co (Personal Communication, NGO4, 2007, Ankara; NGO12, 2009, Sivas).

SURKAL carries out the CIP in six districts of Sivas, including Ulaş. While BTC Co. collaborates with several nonprofit organizations, universities and companies in Azerbaijan, Georgia and Turkey to encourage sustainable development through income-generating activities, vocational training, improvements in community health, social infrastructure (such as schools and clean drinking water systems), agriculture/ livestock, and capacity development, it does not specify what projects will be implemented. In Sivas, SURKAL designed various projects, such as greenhouse development, improving livestock breeds and animal feed, and training and capacity building. To ensure the

Besides engaging farmers for SURKAL’s activities in the greenhouse farming of vegetables, strawberries, and animal feed, the Dernek also established connections to the Istanbul Company. It started to recruit farmers for organic farming. The organic wheat traditional variety production engaged twelve farmers in three villages in an area of 692 decares (about 165 acres). Although farmers had concerns about the decrease in yields in the first two years, after seeing increased price for the product and similar levels of yields, they participated more enthusiastically. Farmers interviewed suggested they would like to continue their organic wheat production as the state also provided support for organic farming. In 2009, the farmers in Ulaş had an additional 150 tons of organic wheat not purchased by the Istanbul Company, and they started to establish contacts with other private companies in Ankara and Istanbul. As a result, many farmers applied for the organic farming subsidy. If these applications are approved, land under organic farming in Ulaş would increase from 5,500 decares (2009) to almost 80,000 decares. The Dernek was also in touch with a national organic certification company to ensure that all the paperwork was complete for the registration of farmers to receive the state subsidy.

The revival of the traditional wheat variety zeron in Ulaş is a result of interventions at multiple scales. Initially, these interventions were autonomous. Yet, in time, they established connections to benefit from their collective experiences, as demonstrated with SURKAL’s collaboration with the local nonprofit organization.
DAPHAN on organic farming training in Ulaş. Farmers skillfully adjusted to this network of organizations, by becoming new subjects of development (i.e., contract farmers) and conservation (i.e., organic farmers), which I elaborate on in Chapter 6. Farmers were also able to exert their agency through articulation of a development trajectory - organic farming based development - in which the traditional wheat variety cultivation has a significant role. Farmers have also learned to become entrepreneurs, to establish their own connections and contact potential buyers. Thus, I argue that the overlapping interventions of several actors, combined with local leadership and interest in development and conservation, have created development and conservation outcomes in Ulaş. Although it is early to talk about the success of long-term conservation of the traditional wheat variety in Ulaş, the revival of the traditional wheat variety confirms the need for interventions at multiple scales for sustained conservation outcomes. What happens when these interventions are not in place?

In Kastamonu, the interest of international and national organizations in einkorn did not translate into a development or conservation project. A series of interventions took place in 2006. The UNDP Global Environmental Facility Small Grants Program (GEF SGP) Turkey National Coordinator visited Ihsangazi to evaluate the project potential of developing einkorn with various stakeholders (Personal Communication, IO3, 2007, Ankara). The GEF SGP works through local initiatives and expects local stakeholders to articulate their needs and vision in a project format, which requires local leadership and existence of a project culture. However, as local nonprofit organizations are expected to voice their development and/or conservation needs in a legible format
with a scheduled timetable and a defined budget, project ideas may not materialize into a specifically defined project, as in Kastamonu. Later, experts from an international organization, Bioversity International, visited the region. In coordination with Turkish national researchers, these experts carried out semi-structured interviews with farmers, farmer-traders, millers and retailers in Kastamonu and Sinop to analyze the organization of the market chain and identify the actors involved in the cultivation, processing and trading of einkorn products (Biodiversity International 2006; Guiliani et al 2009). The research concluded that Kastamonu would be a likely place to overcome marketing constraints for einkorn products. Yet, following actions to overcome the market constraints defined never materialized as a development or conservation project.

The lack of a direct development program or funding for market coordination of the einkorn traditional variety, and the continuing struggles of farmers with its marketing, suggest that revival/survival dynamics of a traditional variety through markets depends on the sustainability of markets, especially in terms of prices received and ensured consumer demand. Although all stakeholders were interested in receiving funds to engage in a project for the marketing of einkorn products, lack of coordination and dialogue among the stakeholders has been a constraint on defining priorities and an action plan for einkorn conservation and livelihood security. My research visit represented another intervention: Through a workshop I held, stakeholders created an action plan for the development and conservation of einkorn. In the meanwhile, farmers in Kastamonu continue to cultivate the traditional wheat variety, einkorn. Many farmers responded that the future plans of an einkorn bulgur factory had an influential role over their decisions.
They also added that they would “cultivate whatever makes money” or “whatever consumers demand” using the language of the markets.

**5.7. Discussion of Findings and Conclusion**

The findings in my research sites build on existing research about agrobiodiversity conservation in Turkey and take it further by addressing recent outcomes of market interventions. Concerns of multiple farmers regarding yield, risk and quality, environmental heterogeneity (drought tolerance, agro-ecological zones, and resistance against pests and diseases), traditional culinary practices (Smale 2003; Brush and Meng 1998; Braun et al 2001; Brush 1995) and access to markets affect the decision of households to grow traditional varieties. Farmers cultivate traditional varieties alongside modern varieties in the transitional zones or under agroecological conditions that do not support major crops (Brush and Meng 1998; Brush 2004). These practices reflect the capacity of farmers to maintain traditional varieties under constant pressure from the markets for high-yielding modern varieties. As I discussed in Chapter 3, these pressures are also reflected in the Turkish state’s agricultural modernization policies, the Green Revolution and current agricultural restructuring, and is also accompanied with privatization of agriculture related industries, seed laws and a decline in state subsidies.

Previous research of on-farm traditional variety conservation highlights that on-farm conservation poses obvious conservation challenges (Benin et al., 2003). Due especially to the extension of market mechanisms into traditional rural livelihoods, there are concerns that increased participation of farmers in markets pose a threat to the
continuation of traditional varieties. However, market mechanisms operate in several ways that are not spatially and temporally separated from development and conservation dynamics at a given location, which create complex outcomes. In this chapter, through two different traditional wheat varieties, I analyzed how market mechanisms worked at three districts leading to different outcomes. While the combination of internal and external dynamics led to the revival of the traditional variety in Ulaş, Sivas and the survival of einkorn in Ihsangazi, Kastamonu, market mechanisms led to the abandonment of the traditional variety in Gürün, Sivas. By elaborating differentiated affects of participation in markets, I argue that market mechanisms are crucial but cannot function alone to produce conservation outcomes.

The findings in my research sites suggest that market mechanisms, especially in the form of marketing traditional variety products, provide an opportunity for the conservation of agrobiodiversity but need external interventions to manipulate consumer demand and to sustain markets. In Sivas, Ulaş, the connections and overlap between development programs of international organizations, the national nonprofit organization and the Turkish state were crucial in the production of conservation outcomes. Although these development mechanisms did not have specific conservation goals for this specific location, the farmers decided to revive traditional varieties to benefit from the new opportunities of available markets and incentives. The complex combination of internal dynamics of households with external interventions is also visible in the recent rush of Ulaş farmers to organic farming practices in general. Ulaş farmers applied for organic farming subsidies recently announced by the state and chose to continue traditional
wheat variety farming. To overcome problems related to physical availability of markets, the Dernek started to establish connections with the private sector in order to market the traditional wheat variety. This shows not only how farmers have become subjects of development but also how they developed new subject formations, such as farmer as entrepreneur, which I elaborate in Chapter 6.

The revival/survival/abandonment outcomes in three different sites confirm the significance of household behavior for agrobiodiversity conservation (cf. Meng 1997). In Ulaş, for instance, the farmers could have chosen other crops or wheat varieties they assumed to be of cash value. Yet, both SURKAL, the national nonprofit organization, and the Dernek, the local nonprofit organization, emphasized the non-monetary value of conservation of the traditional wheat variety zeron for future generations, and reinforced this through their meetings, which I elaborate further in Chapter 6. And finally, the revival of a “folk variety” or peasant variety in Gürün presents challenges for conservationists as well as policy makers. The policy makers and scientists I interviewed did not attribute any conservation value to the folk variety. Resonating with the dichotomies between nature and culture, the focus on a folk variety, which is neither the outcome of natural evolution or agronomic practices, can open new discussions about where market mechanisms place value along this nature/culture divide, a subject raising further avenues for future research.
Red with tall flower, and Jewels of Opar. These Florida offerings
grew for a season and then died. I’m sure Svalbard has the expertise
I lack; when the winter night of humanity has passed
some good gardener will know how to bring their seeds to life.
(Nancy Lazar, A collection that is nothing like the Svalbard Global Seed Vault)

A farmer acts like a businessman when he is defined as such: He gets the state subsidy, invests in
drip irrigation, saves water and money, has a good harvest and builds a new cement house or a
new toilet inside his house. However, you don’t change the culture with new money. He still
treats his wife the same [belittling] way” (Personal Communication, NGO15, 2010, Ankara)

6.1. Introduction

Built into a mountainside on a Norwegian island between its northernmost coast
and the North Pole, the Svalbard Global Seed Vault is one more addition to the 1,400
operating gene banks in the world. The Seed Vault was built not to replace the existing
genec banks, “but rather to provide a secure remote backup location for the genetic
diversity contained in the gene banks, should their collections be lost due to natural
disaster or other reasons” (Science Daily 2010). The official establishment of the Seed
Vault in February 2008 came in the aftermath of the worldwide increase in food prices
and coincided with the official food crisis meetings of the FAO. Although the idea of
establishing such a facility dates back to the 1980s (Crop Trust 2010), it only became a
practical possibility under the new international environmental framework established by the FAO’s International Treaty on Plant Genetic Resources for Food and Agriculture to conserve crop diversity. The Seed Vault functions like a safety deposit box in a bank, in which the right to deposit seeds and the access to deposited seeds belong mainly to the state and private-body depositors to the Seed Vault. This limitation on depositors has raised some concerns and criticisms as it excludes the rights of poor farmers who have been crucial actors in breeding and evolution of agrobiodiversity but can neither have access to the seeds in the Seed Vault nor deposit seeds (GRAIN 2008). The non-participatory conservation of the plants in genebanks in general also raises concerns about the contemporary conservation practices in general: To what extent do new conservation practices that create new subjectivities, such as ecologically and economically rational actors, actually envisage conservation by these new subjects?

The Seed Vault is but one example of current attempts of conserving agrobiodiversity at the global scale which has repercussions at multiple scales and reflects the contemporary perspectives on conservation of biodiversity. As a developing country, Turkey is not a stranger to ex situ conservation mechanisms. Indeed, the establishment of the world’s third largest genebank in Turkey in March 2010 (CNN Turk 2010) reflects the same crisis mentality that natural resources must be protected now while at the same time confirming the state’s authority over conservation of its plant genetic resources. Global and national efforts to conserve seeds outside of their native habitat through ex situ mechanisms are important to this chapter for three reasons: First, they reflect the mainstream assumptions that natural resources, such as agricultural
biodiversity, is degraded and under threat of extinction, not only because of too many people, overexploitation, and poverty but also because of market failures (Brown 2002; Lockie and Carpenter 2010). Second, neoliberal practices create new subjects that assign different roles to farmers in conservation and management of agrobiodiversity. In shaping new subjectivities, the policies and actions of the state are crucial as they perpetuate in real ways the public’s perception of these new roles in terms of natural resource utilization and conservation. Third, neoliberal conservation promises to link livelihoods and conservation through participatory approaches and responsibilization of new subjects. However, conservation through genebanks does not imagine participation or fulfilling the neoliberal conservation’s double promises of livelihood development and conservation. Thus, I argue that the state’s policy of conservation of agrobiodiversity in genebanks contradicts with the emergence of the new subject farmer-as-conservationist.

What remains puzzling in regard to state actions in terms of neoliberal conservation are the complex motives and mechanisms by which state actors agree to neoliberal enclosure arrangements, such as genebanks while simultaneously work to create eco-rational subjects to take responsibility for conservation. By bringing together insights from governmentality approach, this chapter interrogates neoliberal conservation’s promises and the state’s role in conservation in new light. I examine what kinds of subjectivities the state promotes for farmers under neoliberalism and how these subject positions are taken up by farmers in order to discuss what these changes mean for agrobiodiversity conservation practices in Turkey. I argue that new subjectivities such as entrepreneur, consumer, and to limited extent conservationist have been taken up by
Turkish farmers with limited change in terms of traditional conservation of agrobiodiversity. Farmers still have limited role in the conservation of agrobiodiversity as the policies favor conservation of plants *ex situ* in genebanks. I argue that this limited role is, in part, due to the Turkish state’s perception of nature as a productive force, and due to the state’s emphasis on the economic aspects of new subjectivities more than ecological ones. I also look beyond what the state wants to happen in terms of conservation and how these plans are played out in contestation against each other to demonstrate how neoliberal conservation is carried out. I believe that using this framework to analyze neoliberal subjectivities opens new venues for understanding how policy discourses and management strategies for conservation and development are formulated. This, in turn allows contradictions in neoliberal conservation practices to be elucidated.

6.2. Neo-liberal Conservation: Eco-rational subjects and messy actualities

Neo-liberal conservation has expanded worldwide through various mechanisms, such as market-like instruments as tools for biodiversity footprint management by governments and businesses, increased corporate sponsorship of conservation organizations and management of protected areas by the private sector (see Bayon et al 2008). The new (neo-liberal) conservation proposes a conservation strategy by providing incentives for conservation through utilization, such as wildlife utilization and extractive reserves, non-timber forest products harvesting, ecotourism, and economic valuation of agrobiodiversity, such as bioprospecting contracts (Brown 2002). Thus, it appeals to
conservationists, social scientists and resource management professionals as a link livelihoods and conservation. However, neoliberal conservation’s assumptions of utilization along development and conservation axis rely on new eco-rational subjects.

Various policy initiatives seek to govern the virtue of free individuals assigning new responsibilities (Barnett et al 2008). I take neoliberal subjectivities also as a starting point to understand changing access to natural resources. Neoliberal conservation practices define what kind of individuals can participate in conservation through participatory and community engagement projects and what types of persons receive benefits in market-oriented conservation practices through these subjectivities (See Hayden 2003).

There can be no production of value without processes of subject formation (Hayden 2003). Through the shifting property relations, both owners and non-owners are required to act both in new ways. The most obvious form of creation of new subjects, for Marx, is a form of dispossession that separates individuals from the means of production and by forcing them into wage labor (Mansfield 2007a). Engaging with the literature on governance and/or governmentality, research on neoliberal subjectivities aims to supplement the understanding of macro processes of political-economic transformations with the micro processes and biopolitical dynamics of market-mediated subject formation (Watts 2003; Sparke 2006). It also concerns the ways in which individual subjects are regulated and disciplined through various institutions and processes in society in order to understand their own positions and personhood in ways that are compatible with neoliberal trends. By moving towards greater individual autonomy and entrepreneurship,
subjects also move away from a more social understanding of the relationship between the state and its citizens (Gökarıksel and Mitchell 2005).

A key feature of the neoliberal rationality is the attempt to achieve a responsible and moral individual and an economic-rational actor simultaneously as “eco-rational subjects”, where “eco” stands for both ecological and the economic (Goldman 2001). Neoliberal regimes seek to construct accountable subjects who rationally assess the costs and benefits of a certain sort as opposed to other alternative acts. (Lemke 2004). This creation happens in various ways: Policy interventions are increasingly re-defined in terms of a shared logic of “responsibility.” On the one hand, individuals are ascribed greater freedom as consumers in markets for goods and services. On the other hand, this greater freedom is balanced by efforts to instill in individuals a concern to look out both for their own good, such as health, diet, education and security, and for various collective goods, such as environmental conservation, global poverty and climate change. (Barnett et al 2008) Thus, the new subject as consumer is free to consume as long as s/he makes “the right decisions,” also ascribed or checked by the markets.

Shifts in property relations also bring new responsibilities, such as an ability to acquire the skills, technology and ethics of accountability that are necessary to care for nature or having the authority and incentive to protect natural resources as environmental stakeholders (Igoe and Brockington 2007). Biodiversity’s subjects, who are now owners of agricultural inputs, such as land, water or livestock, are expected to become entrepreneurs in order to maximize their returns by making the right investments while simultaneously conserving the environment. Subjects are assumed to have the capital or
collateral to enter into conservation oriented business ventures. This shift suggests that new subjects are investors, producers or consumers and can realize the present and projected market value of the nature (Igoe and Brockington 2007). Skills of new subjects can vary from writing grant proposals to international organizations for conservation funding (as in the case of Kastamonu) to engaging in one-to-one business arrangements with private organic certification companies (as in the case of Sivas).

The presumption of a self-interested, maximizing actor who responds “rationally” to newly attributed values in conservation is highly relevant in the discussions of conservation of agricultural biodiversity. Hayden (2003) shows that market-oriented conservation practices, such as compensation within discussions of intellectual property rights and indigenous knowledge emphasize that indigenous people have an interest (i.e., claim) in their knowledge and thus should be compensated for it. The assumptions about eco-rational subjects, also makes the individual responsible for the outcomes of conservation practices on the ground. As the choice of options for action is the expression of free will on the basis of a self-determined decision, the consequences of the action, including the failure of conservation programs, are borne by the subject alone (Lemke 2001).

I believe that addressing neoliberal subjectivities in relation to conservation and the state enhance the analysis in this dissertation in two ways. First, it contributes to debates on the relationship between states and markets, and the diversity of “calculative practices” associated with the rise and transformation of the modern state. Second, although I benefit from governmentality studies and my entry point of analysis is
rationality, I do not assume that macro processes of neoliberal governance are mediated through micro processes of calculation, regulation and subjectification in a formula that bears a constitutive structuring influence over subjects (Barnett et al 2008: 631). Rather, I aim to show the complex relationship between the intentions and planning of conservation and the outcomes on the ground (Ferguson 1990).

6.2.1. The State

The state is one of the main actors/institutions that regulates and disciplines individual subjects to act in eco-rational ways. However, while focusing on eco-nomic rationality, the state does not emphasize eco-logical roles to the same extent. I argue that the complexity of state actions requires some nuance in how we understand neoliberal subjectivities. With its discussion on how neoliberal new subjects, especially eco-logical ones, clash with the state’s control on its plant genetic resources, this section complements the framework I outlined above. As discussed earlier in Chapter 2, states’ actions for neoliberal conservation are intricate, shifting, and demonstrate the complex assemblages of institutions, actors, policies and laws. The discussion also demonstrates that through new enclosures, states engage in balancing acts between enabling access to resources while also limiting it (Peluso 2007).

The tension between enabling and limiting access to natural resources reveals the state’s emphasis on contradictory subject positions. On the one hand, the state acts to protect its full sovereignty and full authority over genetic resources, guaranteed and ascribed by global environmental governance mechanisms. This protection often emerges
in the form of narratives of urgency of creating market-led mechanisms for conservation, that we need to take the right decision right now, in order to become competitive in global markets (Büscher and Dressler 2007; Robertson 2004). On the other hand, the state alone or in alliance with the private sector takes measures to ensure smooth functioning of the markets, such as creation of new subjects. Thus, while the state encourages individuals to become conservationists, entrepreneurs or consumers to utilize natural resources and participate in conservation more, it also maintains control over natural resources by reinforcing traditional conservation practices that favor conservation units isolated from human use such as genebanks.

The nation-state holds full authority to determine access to genetic resources through international environmental governance mechanisms. According to Article 15 of the Convention on Biological Diversity (CBD), the sovereign rights of states extend to genetic resources and the terms of access to these resources are determined by national legislation (Bragdon et al 2008). Article 15 is crucial as it acknowledges economic aspects related to benefit sharing and also has implications to support the conservation and sustainable use of biodiversity. Each state, member party to CBD, is responsible to create conditions to facilitate access to genetic resources. This means that access cannot be unreasonably restricted but be subject to an open negotiation and bargain between the individual user and the provider nation-state (Hayden 2003; Bragdon et al 2008:89). By redrawing the commons in the authority of nation-states, the CBD grants national sovereignty over biological resources. Thus, the CBD creates a new articulation of biodiversity, as a resource that comes with new kinds of potential claimants attached. As
Hayden (2003) argues, despite incorporation of *in situ* conservation and traditional knowledge, the recognition of state’s full sovereignty over biodiversity creates new kinds of participation, exclusion and inclusion mechanisms in the conservation of biodiversity. This has implications for agricultural biodiversity, as the CBD reiterates the bioprospecting mantra that the only valuable storehouse of biodiversity is a properly inventoried one, such as a genebank. As a result, states keep their commitment to conducting inventories of their national biological resources and reliance on ex situ conservation mechanisms for conservation of agricultural biodiversity.

The state is also expected to share its authority as it promotes new subjects to engage in conservation and take action either in their own good or for the collective interests of the community. The participation of new subjects in neoliberal conservation could be coercive (i.e. “use it or lose it” agendas) or voluntary but resonate with the promises of community based conservation. Community based conservation eschews top-down, center driven efforts in favor of natural resources or biodiversity protection, by, for, and with the local community (Western and Wright 1994). In many instances though the appeal to community often constitutes an idealized alternative for a motley group of failed or earlier models, which could be the state or development itself (Hayden 2003). In this sense, the acknowledgment of state’s full authority over its plant genetic resources and its commitment to ex situ conservation mechanisms contradict with the community based or participatory approaches, such as *in situ* conservation on the farm by farmers. It also raises further questions about the participatory conservation promises of neoliberal conservation.
6.2.2. Participation in Neoliberal Conservation

The framework of analysis that brings together neoliberal subjectivities and the state also allows questioning participation in neoliberal conservation and how access to natural resources is limited under neoliberalization. The discursive turn toward participatory and community based conservation has been linked with issues of equitable access to natural resources and social justice, the promotion of sustainable livelihoods, the alleviation of poverty through participatory and empowering processes of development as well as seeking the most effective ways to ensure conservation (Forsyth et al 1998; Hayden 2003). The problems of integrating participation and community into conservation suggest that despite the near hegemonic status of community participation in current sustainable development initiatives, there has not been a systemic shift in the way development has been imagined and managed (Hayden 2003). Participation has often been employed as part of a top-down management that includes people in passive forms cooptation and consultation, which does not address power imbalances or underlying conflicts (Brown 2002).

At the ideological level though, the conflict between participation and biodiversity conservation stems from the renewed interest in Malthusian politics of population control which continue to see “people” as the problem accompanying the engagement with participation rhetoric (Hayden 2003). Indeed, the “crisis” discourse, as stated earlier, still fills the corridors of international organizations that address natural resource management problems. As the negative assessments about the role of local
people and community in conservation, even grounded in reality, are consistently produced at institutional settings, “it becomes easy to present facile paradigms of how local people will participate in, and benefit from, conservation interventions” (Igoe and Brockington 2007:442). Thus, contrary to its promises, such as giving communities ownership of natural resources, along with the legal authority to manage them or alleviating poverty by making communities business partners, market-oriented conservation mechanisms may displace local people from their livelihoods, prevent them from making informed decisions about the conservation process or receiving financial returns generated through conservation (See Igoe and Croucher 2007). Moreover, individuals are presented contradictory subject positions that while they are expected to make the right decisions as consumers or entrepreneurs for the best of nature, their conservation capacity may not be recognized fully under neoliberal schemes.

If lack of recognition of conservation capacity is, to some extent, related with the problems of equivalency between scientific and traditional knowledge, it is also related to recognition of the “right” subjects in conservation markets. Market oriented mechanisms in conservation introduce new forms of exclusions and inclusions. As Hayden (2003) argues, for instance, bioprospecting contracts involve rewarding the “right” people for their contribution to value-production through the designation of property benefit-recipients, who will be made visible specifically as local subjects and community interlocutors, and creating incentives for developing country participants to “value their resources” in ways imagined by project funders and architects. Thus, even voluntary participation of new subjects in market-oriented conservation mechanisms rely on the
imagination of the state or other organizations involved in the creation of such mechanisms in the first place.

The three strands in the argument, subjectivities, the state and participation, come together to augment each other in productive ways. While the framework allows analyzing the actual disciplining work required to make markets function, it also presents an opportunity to question what this means for conservation practice on the ground. However, disciplining is not always successful as individuals do not become capitalist subjects and act in ways not assumed by market proponents even when they participate in markets. I argue that this should be expected as strategic action under neoliberal regimes does not overdetermine multiplicity, variety and diversity. Yet, it is also the contradictory regulation of the state that makes individuals behave in certain ways which are compatible with neoliberal trends and, at the same time, reinforce traditional conservation practices and their exclusionary premises. I argue that this framework presents an opportunity to examine the persistence and renewed interest in conservation in genebanks, in the world and in Turkey, not as a contradiction of neoliberal conservation’s promises and actualities, but as a mechanism that create new exclusions and inclusions similar to other attempts of commodifying nature. This framework also allows me to ask new questions about Turkey’s contemporary agrobiodiversity conservation practices in order to understand how the state simultaneously creates new subjects, but limits them to act in their full capacity in relation to conservation. The combination of these three strands of analysis highlights how the state and neoliberal policies target the behavior of farmers who continue to cultivate traditional wheat varieties. By turning these farmers
into eco-rational subjects in fitting with market-oriented mechanisms, these new subjects ultimately serve the state’s goal of agrobiodiversity conservation *ex situ*.

**6.3. New Subjects of Agrobiodiversity Conservation in Turkey: State’s Perceptions and Farmers’ Responses**

A cursory look at the main agricultural policy changes in the 2000s in Turkey demonstrates the state’s goal to achieve a competitive and sustainable agricultural sector structure, through improving the competitiveness of agricultural holdings and food manufacturing enterprises but also transforming the rural social structure (ASP 2004; IPARD 2008; World Bank 2001). This transformation is envisaged through creation of new subjects under various programs, such as the World Bank funded Agricultural Restructuring Implementation Program (ARIP), Agricultural Strategy Paper 2006-2010, the new Agricultural Law No 5488 that passed in 2006 and the Instrument for Pre-Accession Rural Development (IPARD) Program implemented since 2007 in line with EU accession. These documents suggest that the policy changes in the Turkish agriculture have been designed to reduce subsidies, substitute a support system for agricultural producers (World Bank 2001) and “decentralize state owned agricultural enterprises” (Oyan 2002). Interestingly, the Turkish state has been the main actor in the design and implementation of these changes towards decentralizations. While the Turkish state has continued to intervene in certain areas such as insurance support schemes in agriculture since 2006, it has also established alliances with the private sector to extend credit and consumer products to the farmers since the second half of 2000s. The policies
and actions that accompany all these changes have also contributed to a new understanding of Turkish agriculture and the Turkish farmer. These changes have implications for the conservation of agrobiodiversity.

The agriculture restructuring in Turkey coincides with this new phase in perceptions of both agriculture and farmer in Turkish development. A review of official documents shows that “rural economy” is associated with Turkey’s past but not its future. Based on the assumption that “economic growth reduces the need for the safety net function that subsistence or semi-subsistence farms have had in the past” (IPARD 2008), and agriculture alone cannot provide sufficient income and employment for the whole rural population, the Turkish state formulates policies for economic growth in non-agricultural sectors (DPT 2006). Subsistence and semi-subsistence farmers still represent a large fraction of the rural population and agricultural employment, the Turkish state focuses on restructuring and modernization of agriculture, “in particular with regard to subsistence and semi-subsistence farming” and the economic revival of rural areas (European Commission 2004:37). These interventions towards further modernizations are likely to drive more farmers out of business and create social problems due to increased migration and unemployment (Personal Communication). Whether it is an unintended consequence or “a planned outcome”, as raised by one international organization expert, the reduction of rural population is linked to other state goals of increasing the size of agricultural enterprises, making agriculture more intensive thus making it a capital intensive sector. The attempts to restructure Turkish agriculture can also be read as how certain sectors, such as agriculture, do not reflect Turkey’s self-image in development
unless they “restructure” and adapt to “become competitive,” key words that pop up several times in every national and international document related to Turkey’s agriculture. In order to make the agricultural sector competitive, the Turkish state requires actions by eco-rational subjects that think and act in line with the neoliberal agenda.

The state’s attempts of creating new subjects evolve in tandem with the efforts of international organizations. An important milestone in the state’s efforts is the World Bank funded ARIP, which I elaborated further in Chapter 3. With its components such as establishment of National Registry of Farmers (NRF), the Rural Development Investment Supporting Program, Village-based Participatory Investment Program, and its emphasis on integration agriculture with conservation through Environmentally Based Agricultural Land Utilisation (CATAK)\(^6\), ARIP has also been crucial in creating new subjects within the farming community. Many of the environment or development oriented components were added in 2004 in line with the sorts of programs favored by the EU for pre-accession funding (See ARIP 2009), which suggests connections at multiple scales in terms of conservation and development process.

### 6.3.1. Farmer Redefined as a Traceable Record

As an important step in restructuring Turkish agriculture, the Turkish state has taken an active role to regulate farmers more efficiently, first by making farmers visible

\(^6\) I preferred to use the translation by OECD and Turkish MARA, whereas WTO prefers to translate CATAK as Conservation of Agricultural Lands for Environmental Purposes (WTO 2007).
and traceable in the agricultural system. The state has established systems in coordination with international organizations such as the World Bank for farmer registration in the National Registry of Farmers (NRF) in order to be eligible for direct income support system, an alternative to government subsidies which were deemed to be of concern in 2000. From an economist perspective, the existence of NRF and linking agricultural support payments to the NRF system ensures a dependable base to calculate state’s expenses on agriculture (Çakmak 2004). Yet, being visible in the eyes of the state did not fit comfortably with many farmers: When the NRF was established to provide direct income support, about 35 percent of the farmers did not apply due to the fears of taxation or the reimbursement of subsidy in the following years by the state through various means (Kızılaslan et al 2007) which points to the suspicions of farmers about state’s goals of agricultural changes. Moreover, despite the initial target that 95 percent of 3.1 million Turkish farmers would be registered in the system, the actual target achieved at the end of 2008 was 100 percent of 2.75 million eligible and registrable farms already accountable in the national system. (ARIP 2009)

To be eligible for income support, payments or other agricultural support mechanisms, farmers have to be registered in the NRF and renew their registration every year in return for a small fee. Farmers provide official documentation about the people in their households, their land, titles, their crop pattern, their tax number, bank accounts and cadastre information in a “folder” to multiple state agencies (Official Gazette 2005). In both research sites, the number of registered farmers fluctuated according to years. In Sivas, Gürün, for instance, one state official acknowledged that the number of farmers in
the NRF would vary from 2600 to 3200. As main causes of this fluctuation, the same state official added that some farmers could not complete their folders due to cadastre problems (i.e. farmers cannot register land smaller than a certain size), and inheritance (i.e. some farmers cannot afford to pay inheritance fees and cannot transfer title of land in their names). Although farmers acknowledged the fees associated with registry in the NRF system, only a few farmers, especially livestock owners, complained about the bureaucracy associated with filing in their folders.

The NRF is currently linked to organic farming, enabling the state to promote environmentally-friendly but also market-oriented agricultural production practices. A new legislation states that current payments for farmers engaged in organic farming will only be provided to farmers in the NRF (see Official Gazette 2010), whereas other documents also reinforce similar association between registry in the NRF and eligibility for direct income or premium supports (European Commission 2006; MARA 2008). Many of the farmers interviewed are aware of the new state support scheme for organic farming. Yet, only those who had access to information about deadlines through their links at various institutions, such as the Agriculture Chamber, development or conservation organizations, private companies, confirmed that they have submitted their folders before the deadline. Even one local state official expressed his concerns about the difficulty of filing in a folder, “running from room to room without finding somebody to help”. Although many farmers have expressed their willingness to engage in farming without the use of agricultural chemicals, which they defined to be the key of organic farming, the variations in the involvement of farmers in organic farming registration
depends on the individual’s social position and involvement with earlier development and conservation practices (See Agrawal 2005). Thus, more farmers in Ulaş, which engaged in development project with a national NGO, registered for organic farming as they already had links with a private organic certification company and close association with Agriculture Chamber were able to file in their folders on time compared to relatively few in Gürün (Personal Communication, SO15, NGO11, NGO13, 2009, Sivas). The variations in subject formations are also related to the outcomes of earlier environmental practices, such as organic wheat contract farming in Ulaş, which changed the beliefs of farmers about organic farming and increased their cooperation with the state’s regulation of agricultural production through registration system.

6.3.2. Farmer as Entrepreneur

As a second step to realize its vision of agriculture and farmers, the Turkish state has linked agricultural subsidies and support based on the property of farmers, such as the size of the land or the number of livestock. Reflecting a similar ethos to other measures taken to promote entrepreneurship in rural areas, strict classifications about the eligibility to international funds or state subsidies bring about the class divisions within the rural community. Many of the provisions in the eligibility requirements support medium size farming enterprises, such as the eligibility of a farmer with minimum 30 cattle or 100 goat or sheep for newly developed preaccession rural development funding (IPARD 2008), while isolating resource-poor small scale farmers and eventually driving them out of business.
Through funding from international organizations, such as the World Bank, the Turkish state has already taken steps to increase the optimal size of land holdings through land consolidation and support community-based activities in small-scale agricultural processing, marketing and other off-farm businesses. Through Village-based Participatory Investment Program component of the ARIP, the state supported the alliances between the private sector and individual farmers or farmer groups in 16 pilot provinces between 2005 and 2007. The available funds covered 50 percent of the costs of such investments for development of small-scale businesses in rural areas, including meat processing, construction of greenhouses using alternative sources of energy, food processing and packing. Through funding from the World Bank, the state also financed 75 percent of investments of collaborative infrastructure projects by the public sector, the private sector and the farmer(s) related to the provision of public services in remote rural areas (OECD 2007; WTO 2007). While these project schemes imply the privatization of the rural works under the public realm, the state’s role in regulating such work also suggest connections between deregulation and reregulation under neoliberalism.

The Turkish state emphasizes farming as an enterprise and farmer as an entrepreneur. The establishment of a new state agency, Agriculture and Rural Development Assistance Administration in 2007, accredited agency in the distribution of IPARD funding received from the European Union and its work also demonstrates this emphasis. By financing 50 percent of the investments by “farm enterprises,” a word regularly used in official bulletins of the agency since 2008, the agency aims to “encourage farmers for agricultural investment” (Ekin 2010). In order to promote
entrepreneurship, the state finances only part of the capital required by agricultural enterprises. This means that the state supports those farmers who can actually afford establishing or managing such business ventures. As one World Bank official stated, the shift to new support mechanisms, such as direct income support, through ARIP in 2001 aimed to address the capital needs of farmers to promote agricultural investments (Personal Communication, IO6, 2010, Ankara). The narratives of local officials also reflect the expectation of farmers to become “entrepreneurs” and “produce like European farmers.” If farmers do not act accordingly, then they are accused of being lazy, not working enough or producing “enough projects to take money” to develop their rural communities (Ekin 2010).

Farmers are expected to become entrepreneurs not only to protect their personal interests but also to serve the common good. These subject positions are reinforced through projects, implemented by the state in cooperation with international organizations. In Sivas, the World Bank funded a series of projects to promote farmers’ participation in conservation of heavily eroded watersheds in forest areas in return for income generating activities (Personal Communication, SO16, 2009, Sivas). A farmer in one of the project sites stated that he “invested” in drip irrigation to conserve natural resources and his son, who was in his early 20s, became a trainee in the state’s pioneer farmer program so that he could learn “new and efficient” farming practices (Personal Communication, E38, 2009, Sivas). Farmers internalize the language of new conservation practices to articulate their interests and needs. During focus group discussions in Kastamonu, for instance, farmers equated writing grant proposals for the EU with
becoming entrepreneurs. Whereas one farmer expressed his experience of visiting similar food processing factories established by EU funds in close locations, another farmer-trader who received EU grants to establish a flour factory expressed his concerns about high expectations of the EU from farmer as entrepreneur (Personal Communication, FG1, 2009, Kastamonu).

The farmer as an entrepreneur is also expected to protect his investment. Farming is no longer assumed as an everyday activity of farmers, the outcomes of which are dependent on unpredictable weather and harvest but can be protected against loss. The Turkish state has regulated the agricultural insurance sector through new laws such as Agriculture Insurance Law and related bylaws, which passed in 2005 and in 2006 respectively. These regulations set up State-Assisted Agricultural Insurance Pool, a quasi public-private body (TARSIM 2010a). Farmers registered in the NRF are eligible to receive 50 percent assistance for their agriculture insurance expenses from the state.

Although the participation in the insurance program in based on voluntary applications, the focus on “risk” of farming and the needs to take precautions in the media and communications campaign encourage more farmers to insure their agricultural “enterprises”\(^7\). Through the creation of appealing characters in public campaigns with whom farmers can associate themselves, such as an old farmer woman who is destroyed after flood in her farms and the smart Super-Farmer with his traditional hat and superman cape who is relaxed because he has insurance (Figure 6.1), the state emphasizes agricultural insurance as the “rational choice”. The campaign also suggests that the

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\(^7\) The Annual Report of the Agricultural Insurance Pool states that there has been a 14 percent increase in the number of farmers insured from 2008 till 2009, a jump from 260,944 people to 306,770. The biggest increase was in the number of livestock life insurance policies (TARSIM 2009)
farmer should “invest” only a small portion of his daily income, as little as a liter of milk from his cow, to overcome risks (TARSIM 2010b).

Figure 6.1. A poster by TARSIM, in which the Super Farmer says “Don’t say it will not happen to me. Get your crops insured”

My interviews with farmers in northwest and central Turkey suggest though only a small minority of farmers, who are economically better off, with larger size of land and some sort of multi-year crop, such as orchards, have their harvest insured (Personal
Communication, TR-I2, 2009, Kastamonu; E31, 2009, Sivas). Unfortunately, the weather in 2009 was bad that hail caused great damage at both of the research sites. A farmer in Gürün, defined as “the pioneer farmer who collaborates with multiple state agencies,” had insured his apricot orchards, stated that he had to “protect his investment.” By comparing his loss with that of other farmers who did not have insurance, he suggested that he gave the best decision and he would insure again (Personal Communication, E38, 2009, Sivas). For many other farmers though insurance of even livestock seemed as a luxury investment rather than a necessity (Personal Communication, E15, E16, M2, 2009, Kastamonu). I argue that the focus on insurance is another step of conservation oriented business ventures’ to realize not only present market value of the nature but also the projected market value. To do so, a farmer needs sources.

6.3.3. Farmer as Consumer

International organizations have often highlighted that a major problem for poor farmers is access to formal rural financial services. In their reports, these organizations suggest the willingness and ability of especially small and poor farmers to borrow from commercial sources is greatly diminished due to the high cost of commercial credit. Due to lack of affordable rural financial credit sources, agriculture is deprived of investment resources (IFAD 2006; IPARD 2008). Until 2000, the state was the main provider of rural credit through its two banks, Ziraat Bank (Agriculture Bank) and Tarisbank (the Agricultural Sales Cooperative Bank). However, due to the financial crisis in 2001, and the accompanying World Bank and IMF-led adjustment program, Ziraat Bank was
banned from providing credits and Tarisbank was privatized (sold to a private bank). Thus, in early 2000s farmers’ access to credit opportunities became limited to local loan sharks (Yildirim 2008).

The engagement of the private sector in rural credit schemes is relatively new. Only in 2004, following both the restrictions in state-provided credits to agricultural sector in the aftermath of 2001 economic crisis and the promise of EU accession for the agricultural sector, the private banks restructured to engage with farmers (Radikal 2005). Besides the lack of private involvement in rural credit earlier and the potential for new clients, the private bank interest in the rural finance and credit stems from the need of agricultural enterprises to modernize during EU accession and the opportunity to market agricultural products to European markets as a result. As one private bank director stated, through rural credits and finance mechanisms, the goal of private banks is also to achieve a competitive agriculture and raise its standards (Radikal 2005). Since 2004, there has been a surge both in the number of banks working with farmers as well as the number of loans and products presented as part of “Agriculture Support Package” by private banks (see Figure 6.2). Indeed, one private bank claims to have one in every four customer to be a farmer by 2012, not only through the agriculture investment and management loans but also through individual “Producer” credit cards8 (Denizbank 2010).

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8 The bank has a different payment plan for the Producer credit card offered to farmers: It is paid only once a year, the date of which is decided based on the harvest time of the farmer (Radikal 2005)
The state has established cooperation and alliances with the private banks for credit schemes. The high risk characteristics of the clientele, the farmers, is offset by the cooperation between the private banks and the state through insurance mechanisms and
eligibility conditions such as registration in the NRF first to ensure repayment of loans⁹.

The state has also established alliances with the private sector to promote consumer product packages for farmers, such as cell phones. With the slogans “affordable calls for everyone” and “good-harvest call package”, the cell phone companies offer monthly-fixed rates for cell phone using farmers (Figure 6.3). With the expectation that these farmers are likely to take rational decisions about their farming, many companies also offer free texting services on daily weather and current news about agriculture. These new services not only provide rights through free market mechanisms but also make them accountable to take the right decisions to protect their investments as well as nature.

Almost all farmers in the research sites owed loans to one or more banks and state institutions. Although they acknowledged the existence of one or two households in every village owing lots of money to loan sharks, majority of farmers admitted that they still preferred to get credits from state-owned banks in the form of agricultural equipment loans, special package loans (from the second bank to pay off the loan to the first bank) and necessity loans (i.e. during wedding of a son). A respondent, who was a small size farmer with three teenage children acknowledged that despite the lack of knowledge of the exact figure of the interest rate of the loan, he was “a rational person” that he knew how to budget his money. He added that “those one or two people who suffer due to loansharks do not know how to budget. If you do irrational expenses and consume beyond your power then you are doomed. That person did not act responsibly. He bought a second tractor when he already had one. It was his mistake” (Personal Communication, 9

⁹ Indeed, with 96 percent repayment rate, the rural sector has provided to be a profitable sector for the private banks (Ziraatciler Dernegi 2009)
E32, 2009, Sivas). His words illuminate the technologies of self-formation as new subjects are bound by their own mistakes of miscalculations, misinvestments and misjudgements. While on the one hand, they are expected to consume, those who consume excessively, as this farmer suggested, are bound to fail in the new system.

Figure 6.3 Cell phone company announces special package for farmers: Have good harvests Turkey

The increase in consumption is also related to changes in lifestyles and the improvements in living conditions in the village. An economically better-off farmer, who owns medium size land, 45 livestock and a minibus to transport people between three villages, including his, this farmer acknowledged that life in the village has become better “with electricity, telephone, paved roads, computer, internet and washing machine”. While he also complained about the increase in expenses, he added that “life is better
now.” (Personal Communication, E39, 2009, Sivas) This remark by the correspondent is crucial to understand the impact of changing lifestyles on farmers’ perception of environmental, social and economic change: Increased connection to markets and changes in consumption patterns improve living conditions in villages. While weighing the pros and cons of these changes, both rich and poor farmers often welcome these changes as “progress” with positive effects. It also shows the focus on economic aspects of decision-making by new eco-rational subjects, which illuminate problems with limited realization of the farmer-as-conservationist subject position.

6.3.4. Farmer as Accountable Conservationist

Being an eco-rational subject in conservation presupposes having the authority and incentive to protect natural resources as environmental stakeholders. In cooperation with international organizations, the Turkish state has also engaged in agri-environmental payments and started to establish environmental standards in agricultural practices\(^\text{10}\). The state aimed to serve two goals-- to support the sustainable development of rural areas and to respond to society’s increasing demand for environmental services (IPARD 2008). As a component of World Bank funded ARIP, Environmentally Based Agricultural Land Protection Program started in 2006 in four pilot areas, all of which are wetland biodiversity hotspots. The payments granted under this measure were paid for three years in order to encourage farmers and other land managers to serve society as a whole by

\(^{10}\) The recent rural development funds under IPARD distributed through the state have requirements for taking environmental measures according to European Community standards, such as storing manure and managing it at the end the project have been stipulated for farmers with more than 50 cattle or 150 sheep and/or goat in project application documents (IPARD 2008)
introduction or continuation of agricultural production methods compatible with the protection and improvement of the environment, the landscape and its features, natural resources, the soil and genetic diversity and reduction of the negative effects of intensive agriculture on the environment (Olhan et al 2010).

Not all farmers wanted to engage in ARIP funded conservation. Those who benefited from such payments under ARIP defined themselves as “innovative enterprises” sensitive to the environment, and research found that the farmers that were granted the payments had more education than the national average for rural areas and compared to other residents who did not participate (Olhan et al 2010). Although the state extended agri-environmental payments that has started through ARIP to new locations in 2009 and 2010, the percentage of such payments in the overall agricultural payments and support is very little (about one in a thousand of the total 2010 budget) (Bütçe 2010). This brings the question to what extent the state would like to perceive farmer as conservationist and share its authority and control over natural resources with farmers as well as the potential profit from natural resources.

Many farmers voiced their concerns to care about the environment, whether or not they engage in any act of conservation. Some themes came out in many interviews that I was not initially interested in questioning, such as the concern of changing climate patterns as well as the impact of conventional agriculture on bird populations, bees, and human health (Personal Communication, E1, E4, E8, E20, 2009, Kastamonu; E23, E36, E38, 2009, Sivas). Yet, most often these farmers did not have the capital or other resources necessary to establish conservation mechanisms or engage in conservation. The
initial interest in organic agriculture was a result of problems in affording agricultural chemicals due to a price hike in recent years. Interestingly, most of these farmers who gave up agricultural chemicals in their fields for a couple of years were able to get organic farming certification or file in their application for a state subsidy, that they have also become proponents of non-chemical agriculture in their fields (Personal Communication, E28, E40, 2009, Sivas). However, compared to the new subject positions of farmer as a consumer or entrepreneur, the subject position on conservation has limited translation into action. If this was related to farmers’ own resources to engage in conservation practices to some extent, it was connected to the state’s perception of biodiversity as a productive force that could be tapped when necessary and its emphasis on *ex situ* conservation in the genebanks creating new forms of exclusion in the conservation of agrobiodiversity.

6.4. Biodiversity as a Productive Force and Conservation of Turkish Agrobiodiversity in Genebanks

Biodiversity has particularly become an object of neoliberal conservation as a distinctive articulation of nature. Biodiversity comes with a set of powerful set of narratives and perspectives built in. Unlike wilderness which required exclusion of protected areas from human use and the impacts of development, biodiversity conservation entails an offensive effort to meet peoples’ needs from biological resources while ensuring the long-term sustainability of Earth’s biotic wealth. Biodiversity, thus,
represents a kind of nature with particular kinds of value attached—as a resource that can be tapped as human needs and demands change (Hayden 2003).

State officials acknowledge Turkey’s rich biodiversity in every possible occasion. They point to the significance of not only its conservation but also its sustainable use. During his address at the 2009 FAO World Food Summit, Prime Minister Erdogan mentioned that biodiversity “is a global resource to produce new food stuff to feed the world’s population, overcome food insufficiency, develop new species which are convenient for environment and climate change” (FAO 2009b). While it is a responsibility of all nations to conserve biodiversity, Turkey also acknowledges its responsibility to take necessary measures, such as gene banks, for the conservation of this biodiversity (FAO 2009c). In Chapter 4, we have already examined state officials’ perception of modern varieties in terms of farmers’ need of development and the lack of an in situ conservation of crop resources in Turkey. State officials’ perception of nature as a resource to be tapped also contributes to favouring ex situ conservation mechanisms over in situ conservation on farm by the farmers.

When asked whether Turkey would implement in situ conservation of agrobiodiversity on the farm by the farmers, the state officials voiced their concerns about sustainability of such practices for long term conservation of plant genetic resources, the cost associated with conservation of traditional varieties and deprivation of already resource poor farmers from economic development opportunities. One senior state official suggested that Turkey, as a resource rich country, should be compensated by the economically rich countries of the North so that it can compensate farmers who grow
traditional varieties financially (Personal Communication). He acknowledged the need for Turkey to develop *in situ* conservation mechanisms for crop resources as “we, the state, took the control of biodiversity from the farmers” in the process of conservation of biodiversity. However, he quickly added that the emphasis on *ex situ* conservation by the state was a “necessary outcome of feeding the population” and the state fulfils its responsibility by improving the (wheat) varieties already collected among traditional varieties. It also became clear that state officials associate traditional varieties with low levels of productivity as two senior officials, separately, argued that smallholders or subsistence farmers cannot continue to survive through *in situ* conservation. As a senior state official commented, “it would be unfair for smallholders” as they would be deprived of an income if they participated in *in situ* conservation. The “cost” associated with *in situ* conservation also surfaced in discussions about Turkey’s role in conservation of biodiversity. To justify Turkey’s choice of *ex situ* conservation, a senior state official commented: “If traditional varieties will be conserved in situ then it should have a cost. This could mean conservation of maize in Mexico, potatoes in Peru or wheat in Turkey. If the world wants these genetic resources to be conserved by farmers in situ, it should pay the cost. If in situ conservation will become a state policy, we should pay the cost of this conservation to farmers, and the world should pay it to us”. However, another state official challenged whether the state should be in charge of compensation of farmers involved with *in situ* conservation. He talked about current problems related to weak state authority over land where *in situ* conservation of semi-wild relatives is carried out, as the state could not enforce regulations over *in situ* conservation areas effectively. While this
state official questioned the communication between the state and the farmers in addressing the proper conservation goals in case *in situ* conservation on farm is practices, he also questioned the sustainability of state-led compensation mechanisms for *in situ* conservation on farm. This senior official stated that “A farmer will not continue farming traditional varieties based on external compensation for a period of five or similar period”, which suggested that *in situ* conservation needs to generate income to be sustainable (Personal Communication).

While confirming the neoliberal mantra of valuation of biodiversity either through markets or compensation mechanisms, this last statement also acknowledged the monetary calculations of farmers as rational actors. The cost associated with keeping biodiversity on farm reflects the economic approaches and influences of modernization discourses on agricultural conservation as well as the tensions between the developed and the developing states over benefit sharing from plant genetic resources, as also discussed in Chapter 4. Thus, the solutions presented to address *in situ* conservation by state officials involve market-oriented mechanisms that the state should provide “incentives” for farmers conserving traditional varieties *in situ* or the proper valuation of biodiversity through prices in consumer markets. Yet, these solutions do not address problems in terms of farmers’ access to genetic material in genebanks or isolation of farmers’ from the natural resources for whose development they have contributed significantly and on which their livelihoods depend.
6.5. Conclusion

I focus on neoliberal subjectivities in this chapter to complement the dissertation’s analysis of complex relationship between agriculture, conservation and development. This focus is crucial to supplement the macro processes of political transformations with the micro processes of biopolitical dynamics of market-mediated subject formation. Yet, this chapter provides further insights beyond how subjects are regulated and disciplined through various processes to act in ways compatible with neoliberal trends. By bringing together the state and participation into the same framework of analysis, I analyze how the state’s contradictory position on neoliberal subjectivities of farming and farmers enables access to resources while simultaneously limiting it. The framework allows questioning the renewed interest in conservation of agrobiodiversity in genebanks under neoliberalism in two ways: First, in relation to subject formations and second, in relation to neoliberal conservation’s promises of linking conservation and livelihoods.

The analysis of neoliberal subjectivities also helps to understand how new conservation creates new exclusionary practices by defining what kind of individuals can participate in conservation and receive benefits in market-oriented practices. Neoliberal rationality relies on the emergence of a responsible and moral individual who is expected to act both ecologically and economically rational ways. However, I do not argue that strategic action of neoliberalism is mediated through micro processes of calculation to the extent that it overdetermines certain subject positions. There exists multitude of subject positions under neoliberalism, not only in terms of variations of self-formation, but also due to contradictory emphasis of multiple subject formations by the state. I believe that
combining insights from neoliberal subjectivities with the state and participation helps to analyze the complex relation between intentionality of planning and the outcomes in subject formations, and provide a more nuanced understanding of the state’s role in neoliberal subject formations.

I argue that the contradictions in agrobiodiversity conservation in Turkey also stem from the state’s complex role in subject formation. On the one hand, the Turkish state aims to create new subjects that will be responsible for conservation at large. The assumption is that by becoming entrepreneurs, farmers are expected to take rational actions for their own good, the community and nature. Thus, farmers are expected to invest some of their income on their farming enterprises, protect it with insurance, and consume the goods provided in the new markets. On the other hand, state’s actions for neoliberal conservation are complex and shifting. The Turkish state maintains its control over crop resources through traditional conservation practices, such as genebanks. Thus, it does not rely on new subject positions, such as farmers as conservationists, but emphasizes only the economic roles for farmers. Moreover, this limited role is also due to the Turkish state’s perception of nature as a productive force. In this sense, the state and neoliberal conservation maintain old enclosures of agrobiodiversity limiting access to resources and their conservation by farmers.
Chapter 7. Conclusion

7.1 Political Ecology, Neoliberal Development and Conservation

Agricultural biodiversity has been closely linked to development and conservation. The leitmotif of simple modernization in the area of agriculture involved the use of plant resources by the state for the sake of national development. Later, neo-Malthusian fears led to several attempts including technocratic solutions, such as the Green Revolution to solve food shortages in different parts of the developing world, the construction of gene banks for long term seed storage and the inclusion of Farmers’ Rights in functionalist terms into global bioprospecting and conservation efforts. Currently, the globalist agenda of protecting biological resources by privatization, through markets and intellectual property rights, touching upon a whole range of topics central to individual and collective identities—the way we live, eat, perceive and interact with each other (see Flitner and Heins 2002). These different moments historically and spatially overlap and converge with broader economic trends and state-led interventions. Most importantly, the underlying assumptions about food crisis accompany these moves from modernization to globalization/neoliberalization. These crisis narratives are also crucial since they are used to mobilize national and international resources and to create
standardized solutions for the development and conservation of agricultural biodiversity that serve the interests of particular powerful groups (Gray and Moseley 2005).

I have argued throughout this dissertation that crisis narratives prevent us from understanding the specific dynamics and processes of biological, social, political, and economic changes that occur at different spatial scales. My work has also been based on the greater attention to the complexity of the relationship between agricultural biodiversity, development and conservation at these multiple scales. On the one hand, the dynamics of change require scholarly attention to think through how complex factors at the global scale cause transformations at the local scale. On the other, concerns related with the expansion of neoliberalism, and critiques raised against neoliberalism as neo-imperialism, demand critical analysis of contemporary changes in light of postcolonial realities and situating current transformations in historical and geographical contexts. As the investigation of current agricultural biodiversity changes in Turkey has shown agricultural biodiversity is an object that demonstrates how human and nature were mutually produced, making it difficult to define contemporary ecological and social changes as crisis. In my portrayals of the current moment of change in Turkey using a political ecology framework, I argued that current neoliberal restructuring in Turkey cannot be simply viewed through a simplistic winner/loser binary but it is complex and contingent in the historical development trajectory of Turkey. Using a multiscalar analysis, I addressed various dimensions of change and investigated contemporary challenges and opportunities vis-à-vis agrobiodiversity conservation and development to highlight the complex connections in a holistic way. I argued that the changes at the local
and national scales in Turkey are not merely reflections of the global development and conservation policy changes, since the local transformations involve articulations by the state and local actors. As the discussion of the global governance of seed laws shows, I also argued that there is not a single unified global development or conservation policy that coerces national governments toward neoliberalization. Therefore, I have argued that neoliberalization process in Turkey is not simply a matter of global integration into capitalist markets. Rather it is how neoliberalism is reworked and redefined at multiple scales within the state, between the state and the farmers and between the state and international organizations that has brought about contemporary agricultural restructuring.

My aim has been to show how specific political, economic and discursive practices have merged in such a way that neoliberal development and conservation practices appear dominant both within and beyond the reach of global economic, political and environmental policy circles. Investigating the contemporary trends for privatization and commercialization of agricultural biodiversity has revealed its importance for livelihoods and conservation of nature. I have questioned these trends through seed laws, state policies in development, emergence of new subjectivities and market-oriented development and conservation policies in Turkey. I treated Turkey not as a mere case study but rather as an avenue to link everyday practices and contemporary agricultural restructuring to broader processes, policies and ideas that link the North and the South. In pursuing this goal, I have drawn heavily on insights from neoliberalization and nature, development geographies and political ecology.
First, the neoliberalization and nature literature helped me analyze different but interrelated moments of converting agrobiodiversity into a commodity, such as seed laws and marketing of agrobiodiversity products. I demonstrated neoliberalism did not translate into local contexts without a process of engagement and articulation, reminding us the friction caused by physical nature in neoliberalization. Although it takes various forms from privatization to commercialization, commodification is revealed mostly in the form of extension of markets. Bringing together insights from neoliberal conservation with its double goals of development and conservation to creation of new eco-rational subjects, I argued that market mechanisms that serve conservation outcomes or development of livelihoods required interventions at multiple scales by various actors, including the state or international organizations, such as the World Bank, non-profit organizations or private businesses. Through empirical findings in the provinces of Kastamonu and Sivas, I argued that markets are not based on individual actions but rather based on the complex interaction of development and conservation interventions that also require actions of local actors. Bringing insights from governance approach, I argued that markets create new subjects that act as consumers or entrepreneurs who can participate in neoliberal development and conservation programs. However, I have also shown that such participation of local farmers has been limited due several reasons. First, the state continued to perceive biodiversity as a national resource that can and should be used for agricultural modernization and insisted on gene banks, echoing Malthusian fears. Second, market mechanisms addressed neither power relations nor participation problems
embedded in the system, which caused spatially variegated access to markets based on
the outcomes of earlier conservation and development interventions.

Second, I combined insights from development geographies, state theory and
postcolonialism to question the power asymmetries embedded in the geoeconomic and
geopolitical system, the technologies of neoliberalism for its expansion, and power
struggles within the state, which are all crucial to understand the particularities of
agricultural development under neoliberalism. By situating Turkey’s current neoliberal
development agenda in its historical development trajectory, I argued that neoliberal
economic development interventions of the Turkish state reflect both the ambiguous and
multiple positions towards neoliberalism within the state and also the historical continuity
towards Europeanization. Using insights from postcolonial theory, I approached the
desire to become part of global markets as an integration of national development agenda
of regional integration and global development agendas. I also questioned the resistance
and complicity of Turkish state officials in their engagement with neoliberal agendas of
international organizations using insights from development geographies and state theory.
Through an analysis of current restructuring through World Bank funded Agriculture
Reform Implementation Program and European Union accession, I investigated power
struggles within the state, the involvement of the state in the design of neoliberal agendas
and contradictions in the state’s role in neoliberalization. I argued that the Turkish state
embraced neoliberalization as state project through the hegemonic project of European
Union accession. With these insights, this dissertation then challenged common
assumption that expansion of neoliberalism is simple coercion from international (financial) organizations.

Third, I engaged with a political ecology framework, which provided me tools to implement a multiscalar analysis and frame the findings beyond good/bad dichotomies. I started my analysis at the national scale and incorporated the national scale through the dissertation. Whereas Chapters 2 and 3 explored the state’s shifting role in development and articulation of neoliberal development at the national scale, Chapter 4, highlighted the state’s articulation of global environmental governance on seeds and contradictory outcomes at national scale. Chapter 5 examined the state’s role in sustaining conservation outcomes for market-oriented development and conservation programs whereas Chapter 6 focused on the state’s contradictory role in controlling access to crop resources through its creation and reinforcement of certain neoliberal subject positions for farmers while promoting agrobiodiversity conservation in genebanks. However, I did not treat the national scale as fixed. I approached power as constituted in space and time, but not held in one center.

I believe that my focus on the multiple dimensions of agriculture restructuring in Turkey has demonstrated the friction (Tsing 2005) that the physical environment has created for neoliberalization. Agrobiodiversity is an outcome of human-nature interaction in specific ways. Understanding current debates about access to plant genetic resources requires attention to social, political, economic, ideological and ecological aspects of changes that affect both humans and nature. I have highlighted myriad of changes and actors in relation to development and conservation through a multiscalar analysis, which
helped me explore the articulation in implementing neoliberal policies. This analysis also demonstrated that nature is not a passive stage on which neoliberal policies unfold. Rather, my findings highlight that the agency of the state and farmers is at work to make neoliberalization engage nature.

7.2. Gaps in the Dissertation and Future Research

As I started to carry out the first phase of the fieldwork, the world was already living the first phase of a global economic crisis. It had not reached Turkey by then and Turkey was still busy trying to become part of competitive global markets. However, there were already discussions among scholars about the post-neoliberal world order and how development would look after the big crisis (Hart 2010; McDonald and Ruckert 2009; Wade 2010). As the crisis is still evolving, many of the findings of the dissertation then need to be reevaluated in light of the shifts within the geoeconomic system and the effects of such changes on development and conservation agendas of developing states and international institutions. The expansion of neoliberalism could also be evaluated under a new light as the moment, characterized as crisis for the state, farmers, and nature, could be the moment of crisis for neoliberalism in the form it is implemented right now.

A second theme is about the scope and immediate effects of changes. Changes related to harmonization with European Union acquis in Turkey are still evolving, and many of the earlier legislation change, such as the Seed Law, will not come into effect until 2011. The delay between the changes in law and in practice suggests that a wholesale range of changes in agriculture, conservation and development are likely to
emerge in near future. Building on insights and findings from this dissertation, future research can then assess the effects of the Seed Law on access to and distribution of crop genetic resources, on farmers’ livelihoods, as well as on agrobiodiversity conservation. Moreover, the focus on European Union accession on the ground allows us to move beyond discussions of Turkey-European Union relationships based on cost-benefit analysis.

A theme that was raised often during my research was how climate change was affecting development and conservation agendas and the livelihoods of farmers. Many interviewees connected these changes to food security, becoming a critical issue in near future for Turkey. Many state officials acknowledged the value of agrobiodiversity for future food security yet emphasized the need for efficient agricultural practices and modern drought resistant varieties. Farmers have also acknowledged several changes in the growth pattern of their crops and raised their concerns about climate change. Further research can be on climate change and agrobiodiversity conservation or food security and climate change, both of which are of interest to researchers in recent years.

The distinctions between folk variety, traditional variety and modern variety that emerged in discussions of conservation outcomes bring new venues for future research. As a critical object of human-nature interaction, agrobiodiversity demonstrate the ambiguities of nature/culture distinctions. The involvement of human beings in agriculture in the form of selecting, replanting and harvesting seeds already defies the definition of a pure nature, even in the form of traditional varieties. However, the classifications between folk variety and traditional variety in terms of defining what can
be conserved and what does not have conservation value echo the dichotomies between modern and traditional varieties, and between tradition and progress. These themes are emblematic of this dissertation regarding biodiversity and livelihoods because the resilience of folk varieties and their survival through agricultural modernization highlight adaptation to political and economic processes and development interventions. This resilience also demonstrates not only the difficulty of assessing responses of farming communities to neoliberal regimes and schemes in negative terms but also the need to pay attention to specific articulations of neoliberalism at multiple scales.
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224


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Appendix A: List of Extended Interviews

I conducted semi-structured interviews with state officials, representatives of international organizations, nonprofit organizations, and private companies, traders and academicians in 2007, 2009 and 2010. I conducted interviews with men and women in the villages of Ihsangazi, Kastamonu, Gürün and Ulaş, Sivas in 2009. Secondary interviews are noted in italics and not counted in these numbers.

SO: State Official
IO: Representative of International Organization
NGO: Representative of Nonprofit Organization
PR: Private Company
TR: Trader
UP: Academician
K: Woman
E: Man
M: Mixed (used for groups with several or more respondents)

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**Interviews with Representatives of International Organizations**

| IO1    | UNDP ARIP Technical Implementation Team | 10/09/2007 |
| IO2    | International Center for Agricultural Research in the Dry Areas, Turkey | 11/09/2007 |
| IO3    | UNDP Global Environment Facility Small Grants Program | 10/10/2007 |
| IO4    | UNDP-International Fund for Agricultural Development (IFAD) Sivas-Erzincan Development Project | 08/18/2009 |
| IO5    | UNDP-IFAD Sivas Erzincan Development Project | 08/18/2009 |
| IO6    | World Bank Ankara | 06/30/2010 |
| IO7    | Food and Agriculture Organization (FAO) Ankara | 07/01/2010 |

**Interviews with Representatives of Non-Governmental Organizations**

| NGO1  | National NGO, Bugday (Wheat) | 10/10/2007 |
| NGO3  | National NGO, Ziraat Muhendisleri Odasi (Chamber of Agricultural Engineers) | 11/28/2007 |
| NGO5  | Local NGO, Yer Gok Anadolu Dernegi | 10/25/2007 |
| NGO6-1| Local NGO Ihsangazi Agriculture Chamber | 10/22/2007 |
| NGO6-2| Local NGO Ihsangazi Agriculture Chamber | 10/23/2007 |
| NGO6-3| Local NGO Ihsangazi Agriculture Chamber | 06/30/2009 |
| NGO6-4| Local NGO Ihsangazi Agriculture Chamber | 07/01/2009 |
| NGO7  | National NGO, Civil Society Development Center (responsible for distributing EU grants to civil society) | 10/02/2007 |
| NGO8  | Local NGO-Kastamonu Agriculture Chamber | 10/22/2007 |
| NGO9  | Ihsangazi State Credit Cooperative | 07/09/2009 |
NGO10 | Local NGO, Kastamonu Village Cooperatives Center Union | 07/15/2009
NGO11 | Local NGO, Gürün Agriculture Chamber | 08/06/2009
NGO12 | National NGO, SURKAL, Sustainable Development Association, Sivas Office | 08/17/2009
NGO13 | Local NGO, Ulaş Kalkınma Derneği (Ulaş Development Association) | 08/18/2009
NGO14 | National NGO, TURKTED (Turkish Association of Seed Industry) | 09/07/2009
NGO15 | National NGO, SURKAL, Ankara Headquarters | 07/01/2010

**Interviews with Traders and Private Companies**

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**Academician**

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**Interviews in the Villages of Kastamonu and Sivas, 2009**

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Appendix B: Template for Village Interviews

Observation in the Village
Who lives in the village?
What kind of houses are there? What are they made of? Any difference between richer houses and poorer houses?
What is the size of the wheat plots? Where are the cultivated to traditional variety/modern variety/other crops?

Village (Questions to be asked to village headmen; local MARA officials and/or Agriculture Chamber)
What is the total size of village land?
What is the total number of households?
How many livestock are in the village?
What is the landowner/renter ratio? Is sharecropping common?
What is size of the plots? Dry/irrigated land?
Where is the nearest school? How many students use transportation to go to school? How many people migrated with children at school age in the last five years?
What is the level of literacy in the village?
When has the land cadastre and registration system completed? Were all farmers able to register their farmers?
How many registered farmers are in the village?

Household Information:
The number of people in the household? What was the number in 2000?
Were you born in this village?
What is your education? Have you participated in any development/conservation program (i.e. pioneer farming, EU-funded program…)?
What are your main sources of income?
Have you ever thought of migrating to another place?
What is the main source of income? (Agriculture/non-agriculture, cultivation/livestock…)
What are the biggest expenses of the family (wedding, transportation, education, family visits…)? Have you cut your expenses in the last five/ten years?
Do you own livestock (cow/sheep)? Has the number of your livestock increased/decreased in the last five/ten years?
Do you have poultry? Where do you get your eggs, poultry meat?
Do you own a tractor? Any farm equipment? If not, how do you plant, cultivate your crops?
Are you registered in the National Farmer Registry System? Since when? Have you encountered any problems in registering?

**Land Information:**
Do you own the land you cultivate? Do you rent the land? Are you engaged in sharecropping?
How many years have you owned/rented/farmed this land?
Have you bought new land/sold land in the last five/ten years?
When was the Land Cadastre completed here? Was there any conflict in the village?
Could you register all your land?
How do you decide what to plant in the field? Who decides what to plant in the field?
Are you happy where your plots are?

**Crop Pattern/ Wheat varieties/Markets**
What kind of crops do you grow? (list from most to least) How many acres of each crop do you grow?
Did you grow sugar beet (Kastamonu)? When did you quit growing? Why?
Which wheat variety do you grow? Do you grow traditional wheat varieties? Did you ever grow them? On what percentage of your land do you grow traditional wheat varieties?
Since when do you grow that variety? Did you try new varieties in the last five/ten years?
Why do you grow traditional wheat variety? Why do you grow modern wheat variety?
Did you increase/reduce the area you grow traditional wheat variety in the last five/ten years?
What do you use traditional wheat variety for? What do you use modern wheat variety for? What is the amount of traditional wheat you consume annually? How do you consume it? Do you prefer a specific variety for a specific product? Did you use to sell the traditional variety five/ten years ago? How did you decide to sell?
Did you give up traditional varieties in the last 5-10 years? Why/Why not? Did you start planting modern varieties in the last 5-10 years? Why?
Do you sell harvest from traditional varieties in the market? What percentage of the output from traditional varieties do you sell in the market? Where do you sell your traditional/modern wheat variety?
When do you plant/harvest traditional/modern wheat variety?
Where do you process traditional wheat variety?
Do you mix wheat varieties in the field? Why/Why not?
How much yield do you get from traditional/modern varieties?
Do you use fertilizer for traditional/modern wheat variety? What kind of fertilizer do you use? How much fertilizer do you use for traditional/modern varieties?
Are there any diseases, pests for the wheat varieties you use? What are they? What do you do against them?
Do you use any other methods to control pests / weeds/ diseases?  
Do you sell your harvest to the Grains Board? Did you face any difficulty of selling your produce after 2000? After 2006?  
Where do you sell harvest from modern varieties?  
Has there been any change in the growing season/practices in the last 10 years?  
What kind of subsidies/supports did you receive from the state in the last five/ten years?  
Have you changed your crop pattern in line with subsidies?  
Have you sold your wheat to the Grains Union? Has there been any change in their purchases in recent years?  

Cost of Inputs/Life standard Change  
Do you have irrigation in your plots? What do you plant in these plots?  
What is the cost of irrigation? What percent of the household budget does it make?  
What is the cost of seeds? What percent of the household budget does it make?  
What is the cost of fertilizers? What percent of the household budget does it make?  
What is the cost of agricultural chemicals / labor against weeds /pests/ diseases? What percent of the household budget does it make?  
How would you define your household budget has changed in the last 5 years? Last 10 years?  
Do you buy wheat for your household consumption? Why? Where do you buy it from?  
Do you buy seeds of traditional/modern varieties? Why?  
How much does fuel cost? How much do you use for an acre of land? How much has prices increased in the last five/ten years? How have you changed your practices as a result?  
How much does veterinary cost? How often do you call veterinary?  
How much does a kilogram of meat/sugar/tea cost? What are your other household food expenses?  

Seed  
Where do you get your traditional wheat variety seeds? Do you save your seeds?  
Why/Why not? How often do you renew traditional/modern wheat variety seeds? Do you exchange seeds? If so, with whom? Do you buy seeds of traditional wheat variety? If so, where? How do you prepare seeds you save/exchange for cultivation?  
Do you know somebody who specifically set aside his harvest as seeds? (Only to those people: How did you decide to save your harvest as seeds? What kind of preparations do you do? Who do you sell to? When did you decide to save aside the field as seeds?)  
Do you sell your seed? To whom? Which seed varieties does your neighbor / relative cultivate?  
Are you engaged in seed exchange with your neighbor/relative?  
Do you plant one variety in the field uniformly in the same field? Why/Why not?  
Which varieties do you have in your plot now?  
Do you think uniformity of a wheat variety is important? Why?  
How would you define quality of seeds?  
Who decides in the household/ in the village which seed variety to plant?
Have you heard about the New Seed Law? How did you hear about it?
Have you reconsidered choosing a wheat variety after the coming of the New Seed Law? Why?

Extension activities
Have you ever participated in a demonstration trial in the last 2 years? 5 years? Why?
Has an official from the research institute visited the village in the last year? How often does she/he visit the village?
Have you heard about the EU grants/projects? Has there been a development/conservation program here? Who did it? What were the effects?
Have you visited/called the Agricultural Research Institute? Why?
Do you know any recommended wheat varieties for this region?

Credit/Agricultural Support
Did you get any agricultural loans from the Agriculture Bank/any private bank? How did you use these credits? Have you encountered problems obtaining credits/loans? What kind of difficulties? Have you had any problems paying back the credit? Has there been any change in the last five/ten years in paying back the loans?
Have you received any subsidies from the state? Has something changed in subsidies within the last 5-10 years? How has this change affected your decision to cultivate crops/raise livestock?

Perception
What are challenges for life in your village? How has life changed in the last five/ten years? Do you think life is better now?
Do you know the European Union/World Bank/International Monetary Fund? What do you think about them? Has your income changed in relation to any of the programs of these organizations? How?

Cooperatives
Are you a member of any cooperative? How long have you been a member? What are the benefits of cooperative membership? Has there been any change in the subsidies you receive due to cooperative membership?