

DISCUSSION PAPER

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**Geographies of transition:
The political and geographical factors
of agrarian change in Tajikistan**

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ABSTRACT

After more than two decades of agrarian change in Tajikistan, farming structures seem to crystallise. The first signs towards farm individualisation were observed only around 2000, which were the result of significant pressure from outside, when the post-conflict state was highly susceptible to pressure from multilateral institutions. Over time, striking differences in agrarian structures have emerged nation-wide; from highly fragmented, autonomous farms, to elite-controlled large-scale cotton farming. In this paper we analyse and describe the Tajik path of reform, and locate the Tajik case amongst the other reformers in the CIS. We use a political economy and geographical approach to understand the way in which different geographies of transition have emerged in the aftermath of the Soviet collapse. Particular pathways of reform are conditioned by geographical factors, in which in turn, a local political economy comes into play that further shapes the emergence of particular farm models over time.

JEL: Q10, Q15, Z1

Keywords: Agrarian change, political economy, former Soviet Union, Central Asia.

ZUSAMMENFASSUNG

GEOGRAPHIEN DER TRANSFORMATION:

DIE POLITISCHEN UND GEOGRAPHISCHEN FAKTOREN DER LANDREFORM IN TADSCHIKISTAN

Nach mehr als zwei Jahrzehnten der postsowjetischen Transformation in Tadschikistan scheinen sich (verschiedene) Strukturen in der Landwirtschaft heraus zu kristallisieren. Die ersten Anzeichen in Richtung einer Individualisierung waren erst im Jahr 2000 zu erkennen. Dies geschah vor allem aufgrund erheblichen Druckes von außen, als der Post-Konflikt-Staat anfällig war für den Druck von multilateralen Institutionen. Im Laufe der Zeit entstanden landesweit markante Unterschiede in den Agrarstrukturen. Diese reichen von stark fragmentierten, autonomen Betrieben, bis hin zu Eliten-gesteuerte Großbetrieben in der Baumwollproduktion. In diesem Beitrag analysieren und beschreiben wir den tadschikischen Weg der Reformen und vergleichen den tadschikischen Fall mit anderen postsowjetischen Ländern. Wir verwenden einen politisch-ökonomischen sowie einen geographischen Ansatz, um die Art und Weise von Landreform und Agrartransformation zu verstehen. Der Verlauf der Reformen ist bedingt durch geographische Faktoren. Hier entwickeln sich wiederum lokale politische Ökonomien, die weitere Formen von bestimmten Bauernbetrieben prägen

JEL: Q10, Q15, Z1

Schlüsselwörter: Agrartransformation, politische Ökonomie, ehemalige Sowjetunion, Zentralasien.

1 Introduction¹

Twenty years of transition from state socialism society to something "else" (VELDWISCH, 2008, 21) in the former Soviet Union (FSU) has triggered an array of work on agrarian change in the newly independent states (cf. SWINNEN and ROZELLE, 2006; VERDERY, 2003; ALLINA-PISANO, 2008; SMALL, 2007; WEGREN, 2005). Tajikistan is a less explored country, where hitherto scholarly attention was mainly devoted to statehood and nation building in the aftermath of the civil war (see for instance HEATHERSHAW, 2005; ROY, 2000; TUNÇER-KILAVUZ, 2009; MARKOWITZ, 2012). In comparative analyses of agrarian change in the FSU, Tajikistan has been regularly grouped together with Uzbekistan and Turkmenistan, resembling these countries' patterns of production and also patterns of reform, i.e. gradual transformation with latent signals towards liberalisation (see for instance SPOOR and VISSER, 2001; CSAKI, 2000, 48; LERMAN, 1998).

The main recent publications on the rural sector in Tajikistan have been authored by consultancies and non-profit organisations, principally with regional foci, issued with the aim to highlight weaknesses and needs of the rural population (see for instance PORTEOUS, 2003; BAKOZODA et al., 2011; LERMAN and WOLFGRAMM, 2011). Academic exceptions are ROWE (2010, 2009), Robinson et al., 2008; HERBERS, 2006; SEHRING, 2006, who however built on data from the early 2000s.

The post-socialist Tajik context is relevant from several points of view to better our understanding of agrarian change. Tajikistan is the poorest in the Commonwealth of Independent States (CIS), a post conflict, land scarce², food insecure country, where agrarian reforms were halted in most of the 1990s due to a five years lasting civil war (SPOOR, 2012; LERMAN, 2012; HERBERS, 2006). This has had major implications for agrarian transformation, and also explains partially why agrarian structures have not crystallised yet, in contrast to most other FSU states where agrarian structures have more or less stabilised after two decades of independence. However, the post-conflict status is not an argument sufficient to explain the ambivalence of Tajikistan's path of agrarian change, especially to explain particular land use changes up till the late 2000s.

We argue and show that Tajikistan can be regarded as a laboratory of agrarian change, which allows us to understand and answer the question why particular farm patterns do or yet do not emerge in the process of agrarian change. Despite a single land policy, striking differences have come into play over time and space. Through our analysis, we aim to contribute to the broader understanding of trajectories of agrarian change as occurring in Central Asia and in the post-socialist context³, since it provides insight in the trajectories of agrarian change beyond the context of post-Soviet Central Asia.

¹ We thank IAMO (Leibniz-Institut für Agrarentwicklung in Transformationsökonomien), and in particular Martin Petrick and Thomas Herzfeld for input throughout the writing process of the paper and for the facilities and support offered at IAMO to realise this paper, and we thank several colleagues for sharing their research findings and commenting on drafts: Frederike Gehrigk (IAMO), Andreas Mandler (ZEF), other colleagues at IAMO and ZEF (Center for Development Research Bonn), and Patrick Heady (Max Planck Institute for Social Anthropology, Halle). Gratitude is expressed to the Land Deal Politics Initiative (LDPI) and the Catharine van Tussenbroekfonds (www.cvtfonds.nl), who provided funding for research in Tajikistan (2012 and 2013).

² Less than six per cent of the country's surface is arable land (UNDP 2012, <http://www.tj.undp.org/content/tajikistan/en/home/countryinfo/>).

³ Our focus here is primarily on the countries part of the Commonwealth of Independent States (CIS) and Georgia. These countries share a history of nearly 70 years of Soviet unification and a similar period of

In this paper we shed light on the agrarian structures that evolve out of the former Soviet dualistic agrarian structure in Tajikistan, which was comprised of state and collective farms, sided by intensive household plot production. We focus on the way in which often-overlooked and underestimated local geographical factors, and interrelated local political economies, condition and shape the emergence of farm types in the process of agrarian change, in order to explain "regionally differentiated transitions" (SMITH and PICKLES, 1998, 17). We thus have the objective to answer the following questions:

- How does agrarian change in Tajikistan take shape, and what kind of agrarian structure is emerging?
- How can we explain the path of reform, in other words: what have been the factors leading to these outcomes?
- Where can we place the Tajik case among other post-socialist states?

The paper is built on on fieldwork conducted by one of the authors (HOFMAN) in 2012 (April-August) and 2013 (May-September) in the Southwestern region Khatlon, as part of an individual Ph.D. research that focuses on agrarian change in Tajikistan. Principal research methods consisted of participant observation and semi-structured and informal interviews with individual farmers, rural households, (local, district and national) state officials, and local and international NGO staff working in agriculture, with the aim to understand processes of and perceptions towards land reform, and related responses and conflicts over farm practices and access to land.

In the following, we start off with a theoretical section discussing expectations and theories of transition, in which we lay out our argument, namely how the interaction of geography and the political economy steer and shape farm patterns and paths of agrarian transformation. In the third part, we describe three dominant models of agrarian reform within the post-Soviet realm, to show how the earlier described factors created distinct geographies of transition in the FSU. Consequently in the fourth section, we describe agrarian change in Tajikistan, in which we identify three phases stretching the period 1991-2013. We elucidate here as well how and why particular regionalised reforms occurred. Based upon the previous sections, in the conclusion we position the Tajik case among other FSU states, and summarise our earlier findings.

2 Detangling transition trajectories

2.1 Paradigms, expectations and theories of transition

The first years of independence of the former Soviet republics were marked by havoc and crises, in nearly all of the former Soviet states' political, economic and societal spheres (SWINNEN and ROZELLE, 2006; SPOOR, 2013; KANDIYOTI, 2003; ROWE, 2010). The force to de-regulate and restructure the economy were driven by evidence of the inefficiencies in production and allocation of resources that featured the Soviet large-scale production systems, while ideologies played no less an important role.

collectivised communist agriculture, as opposed to the CEE and the Baltics where collectivisation was shorter (VISSER, 2008; VISSER and SPOOR, 2001).

The change from plan to market required a troika of drastic measures in all economic spheres: privatisation, liberalisation and deregulation⁴. The newly independent states should withdraw from their patriarchal role in the rural area, where market-led reforms and private farming would be the panacea for the unproductive countryside (see also LERMAN, 1998, 311; for critique see SPOOR, 1995, 49; SPOOR and VISSER, 2001).

In hindsight, policies aimed at individualisation of farming in many of the former republics had limited effect on the ground, and collective structures showed to be rather resilient in many settings (see for instance ELLMAN, 2003; LERMAN, 2000; CSAKI, 2000; LERMAN et al., 2003; ALLINA-PISANO, 2008). Hence, farm restructuring appeared less successful than expected by its neoliberal advocates, and the way in which reforms unfolded, varied markedly among and within the FSU states (ibid.).

The divergent reform outcomes and "disappointing" progress in individualisation challenged factual expectations, and puzzled many scholars and policy-makers. Attempts to answer the post-socialist agrarian question have revealed characteristics and pathways of reform in different contexts over time and space. The scholarly debate to explain reform outcomes evolved in different phases.

In the mid and late 1990s, led mainly by economists, the analyses and discussion of post-socialist transition pathways, took a rather generic, FSU-wide scope (see for instance LERMAN, 1998; LERMAN, 2000; CSAKI, 2000; MACOURS and SWINNEN, 2000). The focus centred primarily on the speed and scope of policy reforms. Success was ascribed to radical reformers, whereas gradual changers and slow reformers were portrayed as stagnating states – equalling a "muddle through scenario" as SPOOR (1995, 60) criticised the terms of "slow" and "fast" to assess reforms (on these dogmas see for instance CSAKI, 2000, 50; RABINOWICZ and SWINNEN, 1997, 17; LERMAN, 2000, 1146). Moreover, emphasis was put on the initial conditions of the respective republics to explain divergences in reform outcomes, while a "common [Soviet] heritage" (see for instance LERMAN, 2000) and a shared point of departure (LERMAN et al., 2003), were regarded of minor importance. These initial conditions particularly regarded the structure of the economy, and the proximity to markets – without paying due attention to geographic aspects, with which we mean agro-climatic characteristics and location (see for instance CSAKI, 2000, 48; MACOURS and SWINNEN, 2002; MACOURS and SWINNEN, 2000, 1151-52; LERMAN, 2000; LERMAN et al., 2003; VAN ATTA, 1997).

Most authors made a distinction between the CEE and CIS. Success of rapid agrarian reforms was seen in the quick recovery of the former communist states in Central and Eastern Europe after decollectivisation⁵, and assumed successful decollectivisation was based on reform outcomes in China and Vietnam, which had triggered the belief that rural dwellers would soon expand their household plot production and embark on private farming (cf. LERMAN, 1998; CSAKI, 2000, 48; MACOURS and SWINNEN, 2002, 365; SWINNEN and ROZELLE, 2006).

⁴ There is an important difference between privatisation and restructuring. "(...) 'privatisation' refers to the shift of farm enterprise property from the state to shareholders, employees and/or management. 'Restructuring' entails more profound changes and denotes the conversion of the formerly state-controlled collective farms and state farms into profit-oriented farm enterprises that are viable in a market environment" (VISSER, 2008, 123).

⁵ There are a few arguments to explain the rapid recovery of the CEE as opposed to the CIS. First, the proximity to Western European markets probably eased reforms and adaptation in CEE. Second, CEE had "only" been collectivised in the 1940s, meaning that ties to land and to individual farming were still latent apparent (see for further explanation also VISSER, 2008). This latter argument is also used to explain the relative success of China's decollectivisation.

Yet, experiences in the Baltic States, as well as most of the CIS, challenged these assumptions. Especially most of the countries in the CIS fell deep (see for instance SPOOR, 2013 and LERMAN et al., 2003 for international comparison, KANDIYOTI, 2003 on Uzbekistan; ROWE, 2010 on Tajikistan).

In the early 2000s, the debate around transition and land reform shifted, and emphasis was put on social and political factors to explain reform outcomes. Led by sociologists, anthropologists and political scientists, the discussions around agrarian transition paths addressed aspects like social inertia, the Soviet legacy, cadre resistance, corruption and rent seeking (see for instance the contributions in HANN 2003 (ed.), ALLINA PISANO, 2008; VERDERY, 2003 on Romania, WEGREN, 2005 on Russia). At the same time, the importance of republics' initial conditions as determinants of agrarian change disappeared from the stage. The nature of analyses focusing on these socio-political factors was much more in-depth, localised, than the earlier research which had a more comparative approach (ibid., see also YALÇIN-HECKMANN, 2010 on Azerbaijan; TREVISANI, 2010 and VELDWISCH, 2008 on Uzbekistan).

Over time, land reform outcomes showed that the speed and scope of reform policies were no valid indications of eventual reform outcomes. By the same token, the socio-political indicators discussed in later years failed in explaining agrarian change, given that these (social inertia, corruption, etc.) featured most of the Soviet countryside (see for instance the comparison made by VISSER and SCHOENMAKERS 2011 on the reform process in Mongolia and Russia).

Understanding particular trajectories of agrarian change requires us thus to zoom in on less discussed, or overlooked factors shaping reform outcomes. What are more plausible explanations to explain why in some contexts, reforms stagnated or did not take place, while in some other contexts, decollectivisation evolved swiftly? We focus on the little addressed geographical and political economy factors shaping reform. More in particular, we focus on the *interplay* between geography and political economy in shaping agrarian reforms. This allows us to elucidate the stark regional divergence in agrarian pathways in Tajikistan; to address the apparent regional characteristic of agrarian transformation that has emerged over time. In doing so, we go beyond a neoclassical or neo-institutional approach, which provides for grasping and explaining how the unfolding of reforms is embedded in local political, economic and social spheres, and to capture the fluidity and conjectural aspects of the process of reform (see also KANDIYOTI, 2002).

We explain this interplay below. First, by describing how geographic characteristics set the boundaries for agrarian change, and second, how this consequently translates into regional political economies.

2.2 The geographical and political economy factors structuring farm patterns

Transition theories, as we stated in the above, hitherto centred chiefly on economic indicators or anthropocentric factors to explain reform outcomes, like corruption, local resistance, and the Soviet legacy as stagnating farm individualisation. We neither do want to argue that reforms are merely an outcome of environmental determinism (as also explained by IOFFE et al., 2006, 2/70), but rather, as Brookfield remarked in his study of highland ecologies, (1964, 20) "only with this dual understanding of *geography and political economy* is it possible to interpret the resources available to a people, and the manner of their organization and use" (*italics added*).

What we will argue in this paper is that geographical characteristics set the boundary for socio-economic development. A straightforward example is a mountainous village, where the high altitude limits people's livelihoods to producing a small range of crops and livestock breeding. Extreme cold, and limited availability of water and flat land form profound obstacles for crop cultivation. Consequently, a corollary of the fact that particular crops are confined within particular geographic zones, economies specialise (BROOKFIELD, 1964 on New Guinean highlands, BRAY, 1986 on rice economies). As HIRSCHMANN (1981, in VISSER, 2008, 104) explains: "It is not that a staple will determine the socio-political environment in any unique and exhaustive way, but that each time it will imprint certain patterns of its own on whatever environment happens to be around" (see also BRAY, 1986; HALSTEAD, 1996; BROOKFIELD, 1964).

Thus, natural conditions in place permit particular farming patterns, while constraining others. Land reforms, like decollectivisation in the post-Soviet realm, set in motion by a regime, lead to divergent outcomes, conditioned by the local environment. Large corporate farms may emerge in some settings, while smallholders dominate in others. The production of crops grown typically on vast fields like cereals, sugar or cotton (MINTZ, 1985; CANCIAN, 1989; BRAY, 1986, 126; VELDWISCH, 2008; PRYOR, 1992), is optimised through large-scale infrastructure, with mechanised production methods. In *Sweetness and Power*, Sidney MINTZ (1985) describes the emergence and development of sugar production, which requires scheduling and discipline: the "(...) land and mill must be coordinated, their labor synchronized. (...) leading to a land-and-factory combination. (...) Without overall control of land and mill, such scheduling and discipline would not have been possible"⁶ (MINTZ, 1985, 50; see also TOMICH et al., 1995, 119; PRYOR, 1992, 150). Labour is strictly divided, in which few people control the means of production. A similar organisation of labour and polarisation of society is found in extensive cereal production, as described by HALSTEAD (1996, 301) and BRAY (1986, 126-127), and this kind of farm organisation also featured most large production systems in the Soviet Union (see also PRYOR, 1992; VELDWISCH, 2008).

In contrast to large-scale-production systems in lowland agriculture, in highland agriculture centralised management and procurement has less advantages, when "a skilled and experienced smallholder or tenant farmer is in just as good a position to raise the productivity of his land as a wealthy landlord. (...) inspecting an irrigated field for weeds is almost as onerous as weeding it oneself" (BRAY, 1986, 115; see also TOMICH et al., 1995, 119; PRYOR, 1992, 136-38). Thus, in such highland settings, (or wet-rice societies as BRAY, 1986, 115 explains), there is little tendency to consolidate farms. A consequent polarisation of rural society into managerial farms and landless labourers probably remains absent (see also SWINNEN and ROZELLE, 2006, 145; see also PRYOR, 1992, 294).

Following MINTZ (1985; see also HALSTEAD, 1996; and BRAY, 1986; PRYOR, 1992, 143/150) we will argue that the production of particular crops brings into play a particular economy, with some crops (such as wheat) and the subsequent political economy having a strong tendency to result into inequality in the means of production, and a polarisation of society⁷.

⁶ MINTZ (1985, 52) describes the factory-like regime in sugar production, a term which was also applied by VELDWISCH (2008, 29) to explain relations of production on Uzbek kolkhozes. "The combination of field and factory, of skilled workers with unskilled, and the strictness of scheduling together gave an industrial cast to plantation enterprises" (MINTZ, 1985, 52).

⁷ It is important, following PRYOR (1992, 150-51), to note here that not all crops that feature "economies of scale in processing and shipping", are grown on plantations. Although coordination of production, harvesting and processing may be crucial for particular crops (like tea, bananas, palm oil, sugar), these different phases can also be coordinated with smallholders in control of the practices (see also TOMICH et al. (1995, 121).

The production systems entailing large infrastructure can require and trigger a re-configuration of power, through centralisation of political and economic control, as MINTZ (1985) illustrated in the context of sugar production in the Caribbean under control of colonial empires (see also HALSTEAD, 1996, describing the control over cereal production in Neolithic Greece).

The aspect of power becomes more prominent when large irrigation systems are critical prerequisites for crop cultivation. In such a context, irrigation infrastructure can turn into means for the ones in control of the system to exert power over the users, which shows the continued relevance of Karl Wittfogel's notions of "hydraulic states" and "hydraulic societies": "The effective management of these works involves an organizational web which covers either the whole, or at least the dynamic core, of the country's population. In consequence, those who control this network are uniquely prepared to wield supreme political power" (WITTFOGEL, 1957, 27).

Thus, natural conditions in place determine cropping patterns, and dictates farming practices, within which particular political economies develop. This dovetails neatly with restructuring in the post-Soviet era. We argue that geography has been the underlying factor in reform outcomes in the post-socialist CIS. During the Soviet Union, ideology and the strive for universal farm models led to remarkable similarity in farm models, often at the costs of taking into account local conditions, with severe ecological problems as a consequence. Agrarian systems were rather static, with "rigidly defined regional specialisations" (SPOOR, 1995, 47; also PRYOR, 1992). With independence, local ecologies started to reshape the former Soviet agrarian landscape in a more apparent fashion (see also IOFFE et al., 2006, who illustrate the process of geographic differentiation taking place since the collapse of the Soviet Union in the Russian Federation; see also ROY, 1999). At both the extremes, there were advantages at the outset of independence to quickly downsize farms or yet continue larger scale farming (expected and discussed also by PRYOR, 1992, 271).

In some highland regions smaller scale agrarian structures preceded formal legislation towards individualisation⁸ (HANN and SÁRKÁNY, 2003; VISSER, 2008). The traditional scattered farm production units more or less resembled the individual mode of production, giving that the fragmented plots were relatively easy to distribute to former farm workers. Moreover, the labour intensive crops produced in these mountainous geographies never had allowed for large scale mechanised practices and did not require large infrastructure (VISSER, 2008, on Russian Caucasus, SWINNEN and HEINEGG, 2002). This particular configuration has meant that decollectivisation of farming did not imply a large reformation of the physical landscape and traditional farm practices⁹ (see also HANN, 2003, 16 on China's decollectivisation;

⁸ While Soviet planning ignored regional specificities and climatic differences, collective farming was in fact moulded by local conditions. "Regional authorities injected a dose of localism into state planning to the extent they could without running afoul of the Communist Party and state policy" (IOFFE et al., 2006, 107; see also ROY, 1999). HANN (2003, 19) for instance describes in the context of socialist Hungary: "in some areas of the country (...) pragmatic adaptations to local ecological conditions modified socialist principles to allow exceptional levels of continuity with traditional patterns of family farming" (see also HANN and SÁRKÁNY, 2003; see also PRYOR, 1992, 13 who describes autonomous "nominal cooperative farms" in the highlands of Soviet Georgia).

⁹ MEURS and BEGG (1998, 254) provide an example of Bulgaria, where hilly tobacco-growing regions "experienced unusually rapid de-collectivisation". (...) Much of the collective tobacco production had actually been carried out on small plots by families even during the socialist period, and individual fields were relatively easy to restore to pre-war owners."

PRYOR, 1992 on Soviet decollectivisation, see also SWINNEN and HEINEGG, 2002; MEURS and BEGG, 1998 on Bulgaria).

In lowland areas, larger structures appeared much more resilient (see also VISSER, 2008; VISSER and SCHOENMAKERS, 2011; ALLINA-PISANO, 2008 on the Black Earth region). In those former Soviet areas, which featured large-scale production systems, individualisation implied a profound overhaul of former production structures and thus required thorough reorganisation. Taking land out of the larger collective was problematic, and explains why farm restructuring after the Soviet collapse in the lowland environments evolved most often less swiftly, and why reforms did not lead to a significant upsurge in smaller scale production systems, despite pressure to reform. The Black Earth region in the Russian-Ukrainian border zone described by ALLINA-PISANO (2008) exemplifies how geographic characteristics play a role in reform outcomes. Notwithstanding divergence in reform policies in respectively Russia and the Ukraine, farming patterns at both sides of the border were akin. It was the geography that set the boundaries, rather than policies actually did.

The political economy that comes into play is not only shaped by initial geographic conditions, but is as well resulting from the external influence exerted on the polity. Particularly relevant here is advice or pressure to reform exerted by external actors. Loans and guidance offered by multilateral institutions come with numerous conditions, and are part and parcel of development paradigms (see for instance MCMICHAEL and KIM, 1994; and MCMICHAEL, 2013; 5). Among others, MCMICHAEL and KIM (1994) and MCMICHAEL (2013) describe how the United States is using its aid programs since the 1980s, to pursue neoliberal reforms, such as austerity measures and privatisation all over the world. U.S. support in the rebuilding of the weak South Korean and Japan states after WWII (the latter temporarily occupied by U.S. forces at that time) was a large undertaking, which included far-reaching land reforms, with the purpose to build and mimic U.S. farm models (MCMICHAEL and KIM, 1994; MCMICHAEL, 2013, 5; see also BRAY, 1986, 192). The programs during the Cold War were not less driven by transatlantic forces to secure "anti-communist loyalty" (MCMICHAEL, 2013, 5), and served to establish and secure U.S. hegemonic power.

An analysis of the role played by the "international community" is part and parcel of our analyses of agrarian change in the FSU, since transatlantic forces and Multilateral Finance Institutions (MFIs) quickly entered the former Soviet bloc in the early 1990s, with the purpose to reconfigure states' economies and inducing neoliberal reforms (see also SPOOR and VISSER, 2001; SPOOR, 1995; PELKMANS, 2003; GIORDANO and KOSTOVA, 2001). While there was a "blueprint of reform" proposed throughout the Soviet bloc, responses were varied, as authorities' responses to outside pressure reflect geopolitical relations and ideological concerns¹⁰ (see for instance SPOOR, 1995; SPOOR and VISSER, 2001). Whereas some states became adepts of neoliberal reforms, other states were more resistant and/or hesitant in following and implementing advice (see also LERMAN, 2000, 1142; SWINNEN and ROZELLE, 2006, 148). Reform choice is not simply an independent variable, but we will contend, results from interest in, or yet possibility to resist external pressure and advice. Resource rich countries can more easily abstain from the package of external funds, projects and advice, but post-conflict countries, such as Tajikistan, were and are more susceptible to outside intervention (see for example on Kyrgyzstan SPOOR, 1995 and PELKMANS, 2003).

¹⁰ According to RABINOWICZ and SWINNEN (1997, 19) particularly privatization of agriculture was a disputable and sensitive topic for communists and anti-communist reformers, while reform of other economic sectors were regarded rather as result of supply and demand dynamics.

With regard to the "international community" in the FSU context, it is important to note the distinction in the actors and countries comprising the "international community" in the early 1990s in the FSU, which equalled "the west", versus the countries making up the "international community" since the mid 2000s. Particularly in Central Asia, Russia, China, but also Iran and Turkey have entered the stage in the 2000s, in which access to energy, but moreover stability in the region (with the ongoing ruptures in Afghanistan, and ongoing instability in the Chinese autonomous region Xinjiang) have been and still are critical drivers for other states' involvement in the area. The fact that these latter countries are not or less led by neoliberal dogmas, implies less pressure on Central Asian regimes to reform, and convince governments to uphold tight state control over their economies.

We lay out the argument of international pressure in detail in the framework of Tajikistan's reforms, but in the following we first describe and compare dominant models of post-Soviet agrarian transformation, which exemplify how the interaction of geography and the political economy played a role in steering reforms over the course of time.

3 Icons of post-Soviet agrarian reforms compared

In order to explain how the political economy and ecological factors have influenced agrarian transformation in the FSU, we distinguish different agrarian structures that emerged in the post-socialist years in the CIS, in respectively lowland and highland areas. LERMAN et al. 2003 also point at some differences in resp. northern (cold/moderate temperature) and southern (arid) former Soviet republics, describing how climatic zones determined crop specialisation and characteristics of production.

We make a principal distinction between lowlands and highlands, and we analyse first, the lowland breadbasket model, exemplified by the case of Russia; second, the state controlled irrigation model as seen in arid lowland Uzbekistan, and third, contrasting the two lowland reform patterns, the small scale, horticulture and extensive livestock model of the Trans-Caucasian republics plus Kyrgyzstan. We focus on one country per model, as an icon to portray the developments, but include details of other countries where relevant and interesting. In order to highlight and explain the way in which reforms evolved in the respective countries we use several main indicators in a descriptive way, that are summarised in the table below: a) the role of the state in agriculture; b) the range of farm sizes; c) we describe the main crops produced (listed in Table I below). These indicators form integral part of our discussion on the interplay of geography (cropping pattern) and political economy (role of the state) in shaping reforms (farm size).

Table 1: Icons of reform compared

Icons of reforms	Countries	Role state ^a	Farm size ranges ^b	Dominant cropping pattern ^c
Breadbasket model/industrial livestock	Russia, Ukraine, Kazakhstan	Medium	Range 85-100.000 hectares	Cereals
Cotton/irrigation	Uzbekistan, Turkmenistan	High	Range 5-200 hectares	Cotton and wheat
Horticulture and extensive livestock	Georgia, Armenia, Kyrgyzstan,	Medium	Range 1.5-5 hectares	Horticulture, extensive livestock

Sources: ^a CSAKI et al., 2006. ^b VISSER, 2008; PETRICK et al., 2013; DJANIBEKOV et al., 2012, LERMAN, 1998; MILLNS, 2013. ^c VISSER, 2008; MILLNS, 2013; SWINNEN and HEINEGG, 2002; LERMAN et al., 2003.

3.1 The lowland breadbaskets: Privatisation without individualisation

After twenty years of Soviet independence, a strong dualistic model has come into being in the breadbaskets of the FSU: Russia, Ukraine and Kazakhstan. The corporate farms in these countries are extremely large (up to 100.000 hectares), while family farms remain around or below 100 hectares (VISSER, 2008; PETRICK et al., 2013). At the same time private plot production has remained pivotal, accounting for around 60 per cent of the agricultural output in Russia (SWINNEN, 2009, 5).

Agrarian reforms in Russia were pursued radically in 1991¹¹ under strong pressure by MFIs, but nevertheless the popularized family farm model never came to dominate agriculture. Collective farmland was formally equally distributed among farm members in paper shares¹², but it did not lead to an upsurge of private farming. Former kolkhozes and sovkhoses mainly continued to operate in large units, albeit under slightly different names. In the course of the 2000s agro holdings started to emerge, which eventually even meant the revival of agriculture in Russia (VISSER, 2008; PETRICK et al., 2013; WEGREN, 2005). International investors entered in later years (see for instance VISSER and SPOOR, 2011; PETRICK et al., 2013).

The national government held a strong intervening role in agriculture in the early 1990s in order to implement and achieve significant farm restructuring, but policy orientation in pursuing reforming farms shifted when intentions to reform did not work out¹³, and eventually the state diminished its control over the agrarian sector, although subsidies for the sector increased again from the mid-2000s onwards (PALLOT and NEFEDOVA, 2003; VISSER, 2008).

We explain the continuity of large scale farming by the fact that Russia, the Ukraine, and most regions in Kazakhstan were specialised in large scale cereal production on vast plains,

¹¹ Exemplary is the unrealistic Decree of Yeltsin in December 1991, stating that all twenty-five thousand collective and state farms were expected to have restructured in three months (LERMAN, 1998, 312; also VAN ATTAM, 1997, 331).

¹² As in most of the CIS, opposed to the former collective farms in CEE, where physical plot shares were distributed to former workers.

¹³ In Kazakhstan, individual farms appeared rather early but after the Land Code in of 2005, farm reconsolidation occurred by means of merging of farms (PETRICK et al., 2013, 169).

allowed for by the fertile soils, without substantial need of irrigation (see also LERMAN et al., 2003, 1003). The mode of production on large vast tracts of land, featured low land-to-labour ratios, and suited a mechanised, industrial type of agriculture (see also LERMAN et al., 2003, 1005). It implied that smaller scale individual farming did not bring the advantages that it brought in other settings, like in the Caucasus, which we discuss in a section further below. The fact that irrigation was hardly needed in the grain producing lowlands make it different from the arid climatic lowland areas in Uzbekistan and Turkmenistan, where the required irrigation for production has been a shaping factor of farm restructuring.

3.2 The state controlled "irrigation model": Uzbekistan and Turkmenistan

The state-controlled path of reform in Uzbekistan and Turkmenistan can be regarded as an extreme variant of the pattern of lowland reforms. The Uzbek and Turkmen governments, which following WITTFOGEL (1957) could be termed "hydraulic states", opted for a highly state controlled, incremental transformation¹⁴, modelled after Chinese reform as it was claimed. Rather than a deregulation of agriculture, re-regulation has taken place (TREVISANI, 2010). During Soviet times, over 90 per cent of arable land was irrigated in these two countries¹⁵ (LERMAN et al., 2003, 1003), whereas productivity was low (LERMAN et al., 2003, 1015; SPOOR, 1995).

Since 1991, agrarian reforms in Uzbekistan have evolved in distinct phases, given in by paradigm changes (DJANIBEKOV et al., 2012; EICHHOLZ et al., 2013). Only at the end of the 1990s, individual farming started to take form (TREVISANI, 2010; VELDWISCH, 2008; KANDIYOTI, 2003). A period of gradual individualisation of farming followed, but in 2008 the government started to pursue consolidation of land through pooling of land parcels (EICHHOLZ et al., 2013; DJANIBEKOV et al., 2012; VELDWISCH and BOCK, 2011). Hence, a new process of state-led scale enlargement is taking place since the last few years. Farm sizes range between 10 and 200 hectares nowadays in Uzbekistan.

The strength of the state, and its presence in the rural area (both personalised and through technical control), has made that stated reform goals always accurately followed by execution of these objectives. Markets remain closed and soft budget constraints are continued. Individualisation of farming has occurred, but without the freedom to farm that should have accompanied this process to stimulate real private farming.

The reason why there has been continued state control and this peculiar kind of individualisation in these countries is related to a few factors. The resource endowments of these countries (such as oil, gas, and cotton) guarantee flows of foreign currency that generate relative independence and make that the respective authorities can follow their autocratic, exploitive pathway of reform. Hence, the marked international isolation of these states is related to the production of the high revenue commodities, among which cotton is critical. To safeguard and continue the flow of revenues, authorities have high interests in maintaining the status quo¹⁶. Not less important, the state preserves the status quo with state

¹⁴ We exclude Belarus from our model since the country is highly peculiar. In fact, Belarusian agriculture has adhered most of all FSU states to the former Soviet model of farming. Agricultural producers are subject to high state control, even in the sphere of private plot production (CSAKI et al., 2000).

¹⁵ In contrast, in the Russian, Ukrainian SSR there was hardly any irrigation. In Georgia and Armenia (discussed below), around 60 per cent of arable land was irrigated (LERMAN et al., 2003, 1003) yet in these mountainous areas production took place on relatively small units with decentralised irrigation systems.

¹⁶ Meanwhile household plots production is highly diversified and highly productive, as nearly everywhere in the FSU. In Turkmenistan, the private sector is responsible for over 90 per cent of vegetable production (LERMAN et al., 2012, 9).

serviced large irrigation systems inherited from the Soviet time to exercise power, and oversee and control the rural population (also refers to WITTFOGEL's (1957) hydraulic states). The trajectory of actual privatisation process was very slow in these irrigation depending agricultural contexts, in contrast to the pathway of reform in the relatively agricultural land scarce, mountainous countries in the Caucasus, which we describe below.

3.3 The horticulture and livestock model of the mountainous Transcaucasian region

In contrast to the lowland reforms described above, farm restructuring in the highlands of the Caucasus unfolded rather quickly and smoothly. Agrarian reform in the mountainous parts of this region entailed the redistribution of already partitioned plots to the rural populace and thus did not necessarily require further partition of land (LERMAN, 1998; SPOOR, 2012; MILLNS, 2013; KEGEL, 1991). It led to a highly fragmented model of agricultural production. In Georgia most people manage an area below 1.5 hectares (MILLNS, 2013, 18), and almost all farms are less than 5 hectares. Even a "large" farm is below 10 hectares (LERMAN, 2005). Agriculture in these countries is oriented to extensive livestock, and intensive horticulture production in the mountains (mainly subsistence-based), while relatively larger structures are found in the lower range areas, where for instance vineyards are located (KEGEL, 1991, 373).

On the ground, restructuring of farms in the Caucasian countries commenced in the late 1980s through leasehold arrangements (KEGEL, 1991, 367). (Soviet Union-wide authorities experimented with individualised production units, directed by Gorbachev in the late 1980s). In the highlands of Georgia, as also described by KEGEL (1991), leasehold arrangements were further formalised soon thereafter. This was particularly the case where farming was of little interest to authorities, for instance when production was small and mainly subsistence-oriented (KEGEL, 1991, 372-73). In the regions with larger farm units however, with relatively larger-scale production (such as grapes), authorities were less forthcoming in partitioning fields, particularly where it concerned crops that were of importance for the wider Soviet Union.

Over all, the process of individualisation in the Caucasus was far ahead in 1995 and was completed by 2000 at the latest (VISSER, 2008; SPOOR, 2012; MILLNS, 2013; LERMAN, 1998; LERMAN, 2009, see also PRYOR, 1992). Reform plans coincided with actual implementation, as opposed to intention to reform in the breadbasket model described above.

There are a few related aspects to explain the swift initiation of reforms, and their actual unfolding on the ground. First, reform plans fitted the traditional cropping pattern more than collectivised agriculture had done, since agriculture in the Caucasian countries is mainly oriented to horticulture and extensive livestock, conducted on mountainous plots, where improvement of efficiency is achieved best on small units¹⁷ (see also SWINNEN and HEINEGG, 2002; PRYOR, 1992; SWINNEN and ROZELLE, 2006). Farming was thus already performed in a rather individualised way, with little options for private gains for authorities, except for a few crops growing larger-scale that were distributed throughout the Soviet Union (KEGEL, 1991, 373). The low potential for crop revenues in most areas made authorities enabling actors instead of constraining actors, as authorities in the above described lowland models (see also SWINNEN and ROZELLE, 2006, 145).

¹⁷ Decollectivisation in the mountainous southern part of Russia (like Chechnya), where farming patterns resemble Caucasian agrarian structures with a significant share of land cultivated by family farms (LOFFE et al., 2006; LOFFE and NEFEDOVA, 1997).

What is more, small-scale farming proved best to cope in the uncertain and harsh economic climate of that time¹⁸, since most of the Caucasus was marred by ethnic conflicts in the early 1990s. Governments were urged to provide people with surplus land as a more substantial means to survive, and to recover from natural disaster (the 1988 earthquake in Armenia) and war devastation (Georgia and Ngorno-Karabakh (see also LERMAN et al., 2003, 1014-15; also CSAKI, 2000, 51). Reforms were furthermore in line with advice provided by donors, whose aid was pivotal in aftermath of the civil war in the region. In the case of Kyrgyzstan (less marred by conflict, but resource poor, and an "unfortunate geographic location" (PELKMANS, 2003, 185), the government was faced with drying up of resources from the Soviet centre, and "opted for a shock therapy-type of transition". Kyrgyzstan was regarded as the donor darling of the FSU, or "the wonder child in the CIS" (PELKMANS, 2003, 185) in the early reform years. The applauded shock therapy reform was however already in 1995 criticised for instance by SPOOR (1995). Rather than rapid, reforms in Kyrgyzstan were "hasty" or "unprepared" (SPOOR, 1995; PELKMANS, 2003, 186).

Now we have discussed and characterised these various pathways, the next section will shortly describe the Tajik geography and agriculture during the Tajik SSR, followed by an in-depth analysis of the stages of transition that marked agrarian change in Tajikistan, and the way in which the (local) political economy and local ecologies shaped and recasted the path of reform.

4 Agrarian transformation in Tajikistan (1991-2014)

In this part, we analyse and characterise agrarian transformation in Tajikistan. We distinguish three phases: a first period of 1991 to 1998, a period marked by stagnation, in which reform hardly took place; a second period from 1998 to 2007, in which reform remained largely cosmetic; and a third period starting after 2007, in which individualisation of agriculture further progressed, and market-based mechanisms have been introduced to stimulate the commercialisation of farming¹⁹.

In order to follow our argumentation, which focuses particularly on the regionalised character of transition, we first provide a brief description of the geography of Tajikistan by describing the four different regions (oblasts). In the remainder of the article, we might refer to the regions separately, without placing maps, in which the terms highlands and lowlands and the distinction between the two terms will recur time and again, while we simultaneously try to be as specific as possible.

First, the eastern mountainous region Gorno Badakhshon Autonomous Oblast (GBAO) is characterised by mountains up to 8000 metres, making that agriculture has always been restricted to smaller fragmented plots, specifically suited to horticulture and root crops, like mulberries, carrots, potatoes. Winters are severe, and many villages are isolated during this period.

¹⁸ LERMAN et al. (2003, 1009) describe how the conflict in Ngorno-Karabakh between Armenia and Azerbaijan led to an upsurge of private farming, due to a regional blockade that disrupted critical imports of energy and other inputs, and labour migration to rural areas. "The government responded to the growth of the rural labor force by implementing a swift land reform that involved redistribution of most of the arable land. As a result, agricultural employment in Armenia increased by 94 % between 1990 and 1995, and Armenia was the only country registering increased production over this period".

¹⁹ This systemisation reflects nationwide developments, which means that particular defining moments in regions might slightly differ.

A second highland area is located in the western Sughd region, in which mountainous villages are remote; at the same time the region contains extensive plains further north. Hence, this region includes both lowland and highland area, allowing for lowland crops like cereals, cotton and rice on the plains, versus horticulture in the mountains, with fruits and crops like apricots and potatoes. The coexistence of lowland and highland area within this single region implies that statistical data on the regional level represent average numbers.

A third region is known as the "Raions of Republican Subordination"²⁰, (hereafter RRP following the Russian abbreviation). The RRP is located in the centre of the country, and has low mountain ranges, with vast grasslands and horticulture produce, but districts closer to the capital Dushanbe feature plains, where cotton and cereals are produced.

The fourth region is the southwest region in Tajikistan, Khatlon. This region is the primary agricultural region, referring both to the quantity of production and to the amount of arable land (TAJSTAT, 2012). Khatlon region is relatively flat with large plains, and few hills and elevated grasslands. Cotton and wheat are the primary crops produced large-scale, while land use patterns become more diverse in the last few years (ibid.).

Before describing how these crops affect farm restructuring and how regional characteristics came into play in the process of post-socialist agrarian reforms, we continue first with a short section on agriculture in the Tajik SSR, to portray the setting out of which the current structures emerged.

Figure 1: Map of Tajikistan



Source: <http://www.nationsonline.org/maps/tajikistan-administrative-map.jpg>. (Indications of highland-lowland added by the authors).

²⁰ This region has a different administrative structure, since it comprises thirteen districts which are under central rule of Dushanbe, and thus is not an "oblast" (province) as such.

4.1 Socialist period

Before the establishment of large Soviet farms and extensive irrigation systems, most of the area nowadays known as Tajikistan was unfit to large-scale agriculture. The Soviets encroached physical harsh environments and radically changed the landscape, most prominently in the lowlands, where agriculture was only possible with extensive irrigation networks (ROY, 2000; ABASHIN, 2011).

The establishment of large farms in the southwest valley (nowadays called) Khatlon necessitated large forced resettlement and sedentarisation of people from the more densely populated mountains in the east and north (see also ROY, 2000; ZEVACO, 2014; NOURZHANOV and BLEUER, 2013; KASSYMBEKOVA, 2011). Agriculture became to play a significant role in development²¹, and Tajikistan became the third cotton producer of the Soviet Union after Uzbekistan and Turkmenistan (KHAN and GHAI, 1979)²². The extensive state control and management of water simultaneously enabled the state to exercise power and control over the people, to refer once again to Wittfogel's *Oriental despotism*. (We will discuss the implications of power and control over agricultural production in a later section.)

In the highlands in northwest and northeast Tajikistan, sovkhoses and kolkhoses were concentrated on livestock and horticulture, and the Soviets brought changes in traditional cropping patterns by introducing root vegetables and potatoes²³ (BLISS, 2006).

Tajik kolkhoses and sovkhoses (which were in practice not of significant difference) comprised respectively up to 2000 hectares and 2500 hectares of agricultural land (GIESE, 1970, 175), which was a notable small size compared to average Soviet farms²⁴, conditioned by the limited arable land and mountainous landscape in most parts of Tajikistan. Thus, the creation and specialisation of large farms was to some degree shaped by regional characteristics²⁵ (see also ROY, 2000; ABASHIN, 2011; BLISS, 2006; ZEVACO, 2014). Moreover, the relative isolation of a place – the larger distance to the centre in the hinterlands – allowed for some autonomy during socialist and Soviet time, and the degree to which local characteristics could influence life (ABASHIN, 2011; GIEHLER, 2014; see also PRYOR, 1992, 13 on this aspect in mountainous

²¹ While elsewhere in the USSR large parts of the rural population were drawn to the cities for industrial work, in Central Asia the main part of the rural populace remained in place, in order to work on large cotton farms, also because non-farm employment was limited given the low number of industrial sectors (see also KANDIYOTI, 2002; LERMAN et al., 2003, 1006). Another difference with other Soviet republics, was the average number of workers per kolkhoz; in the Tajik SSR this was much higher than the average number of workers on kolkhoses in the USSR; resp. 1027 workers versus 534 (KHAN and GHAI, 1979, 487).

²² The area cultivated with cotton decreased slightly over the years since 1980, which was replaced by cultivation of wheat and horticulture crops (LERMAN and SEDIK, 2008, 36).

²³ Highland communities were originally focused on livestock breeding and horticulture given the mountainous environment they lived in, which contrasted with people's farm work on cotton plains after their forced resettlement by the state (ZEVACO, 2014, 150; GIEHLER, 2014). People continued to value gardening over cultivating other crops, which was believed to be a right way of living, attached to their original environment, and as an "attribute of religiosity" (ZEVACO, 2014, 150).

²⁴ The collectively sown area of a kolkhoz was 1950 hectares in Tajikistan during the USSR (by the year 1973), as opposed to an average of 3539 hectares of collectively sown land for an average Soviet kolkhoz (KHAN and GHAI, 1979, 487). The average large farm enterprise in Russia at the advent of reform was over 9000 hectares (LERMAN, 1998, 319).

²⁵ "Initially the introduction of kolkhoses in their original form did not involve any great change to traditional practices (*in the mountains*) It was only the subsequent dispossession of land, the result of turning kolkhoses into sovkhoses (...) that may have led to discontent, if not to outright public dissent" (BLISS, 2006, 264, italics added).

Georgia). Statehood was fragmented in the hinterlands where the state countered more difficulties to exert power and monitor daily life.

The parcels available to households in the Tajik SSR were small (0.13 hectares) in comparison with average sizes of household plots in the USSR (0.33 hectares) (KHAN and GHAI, 1979, 478). Household plot production went beyond mere subsistence farming, and existed in a symbiotic relationship with the work on the larger collective farm, and was pivotal as surplus to rural inhabitants' incomes (see also GIEHLER, 2014). Private plot production outperformed Soviet farms in terms of efficiency (KHAN and GHAI, 1979; LERMAN, 1998; LERMAN and SEDIK, 2008). Productivity on household plots was four times higher than value of output of the Soviet collective farm (KHAN and GHAI, 1979). This was first of all due to higher efficiency and production, plus the facts that households focused on high value crops, and that prices were freely determined on this quasi-private market (GIEHLER, 2014; also ZEVACO, 2014; PRYOR, 1992, 177). In the late 1980s and perestroika, the state started to allow more individual farm initiative (HERBERS, 2006 and GIEHLER, 2014 on Tajikistan, see also IOFFE and NEFEDOVA, 1997 on Russia, YALÇIN-HECKMANN, 2010 on Azerbaijan, see also VAN ATTA, 1997; PRYOR, 1992). At the advent of independence, household production was responsible for one third of the market supplies (ROWE, 2009, 691).

4.2 Post-socialist Tajikistan

4.2.1 Phase 1. 1991-1998 Collapse of production, stagnation in reform

The first years of independent Tajikistan were marked by civil war, which was concentrated in southwest Tajikistan. The war was triggered by conflicts between regional and religious fractions, but extended to a fight over landed property in the rural south (fieldwork interviews 2013; ROY, 2000; NOURZHANOV and BLEUER, 2013; HERBERS, 2006). The war severely impacted rural communities, disrupted food production and continuation of Soviet large-scale farming²⁶.

The first law to initiate farm restructuring was issued in 1992 with the Law on *Dehqon*²⁷ Farms, but it took long before any change could be observed. In the early 1990s, the number of sovkhozes and kolkhozes increased due to fragmentation of the farms (TAJSTAT, 2011, 503). Since 1996, the number gradually decreased (ibid.). Restructuring of farms was halted with the civil war, albeit smaller changes continued in particular places where the war was less distressing, such as in the highlands, particularly in Gorno Badakhshon (fieldwork 2013; HERBERS, 2006).

In the autonomous oblast Gorno Badakhshon, the highland area located in the east, the collapse of the economy directly after independence triggered a change in production relations. Here, privatisation of farming already started in 1995 (HERBERS, 2006; WORLD BANK, 2012; BLISS, 2006). Due to shortages and deterioration of infrastructure and machinery,

²⁶ People fled to surrounding countries and remote regions and directly after the war, male migration started to take off, which only increased over the years. Tajikistan nowadays is the highest recipient of remittances worldwide, which contribute to almost 50 per cent of the country's GDP (WORLD BANK, 2014). The effect of predominantly male-migration triggers social imbalances and leads to the feminisation of farming.

²⁷ In basic terms, a *dehqon* farm is established by land taken out of the former collective. The literal meaning of the word *dehqon* means ruler of the village (deh – khan). However, in Tajik the term "*dehqon*" denotes "peasant". What we further explain below, all individualised farms became known as "*dehqon* farms" after decollectivisation. In this paper we use the term *dehqon* farm to denote the individualised farm with land use rights according to the Law on *Dehqon* Farms.

vehicles and fuel, production declined, and mountainous production units were more isolated, which created hindrances for exchange of goods and inputs (HERBERS, 2006). Hence, the situation at that time actually necessitated a more individualised, smaller scale mode of farming, although people remained hesitant to take on full responsibility. Farm workers started to object the central procurement system, and in response to secure central delivery, farm management established sharecropping arrangements with farm workers²⁸ (HERBERS, 2006; BLISS, 2006).

Restructuring happened initially without distribution of land use rights (WORLD BANK, 2012). The later formal distribution was highly egalitarian (like in Albania as described by SWINNEN and ROZELLE, 2006, 151), i.e. equal distribution of plots, though sizes of plots were too small to live from (HERBERS, 2006; BLISS, 2006). External pressure, in the autonomous oblast mainly exerted by the Aka Khan Foundation²⁹, has been important in these early years in pushing farm restructuring (BLISS, 2006). Meanwhile in the highlands in the Sughd region, individualisation did not take place in a similar way as in Badakhshon, but as ZEVACO (2014, 168) describes (without indicating a specific year), decollectivisation made people to revert back to their traditional farming customs, which they practice before forced resettlement in Soviet times.

At the same time when drastic change occurred in the highlands, production patterns and production relations in the lowlands transformed less radically. Only in 1996 the emergence of *dehqon* farmers was observed³⁰. This was the year in which the first Land Code was introduced, under assistance of multilateral institutions (HERBERS, 2006), simultaneously with the issuing of President's Decree No. 522 ("On reorganization of Agricultural Enterprises and Entities"), which officially eliminated the state procurement system of crops (MOA, 2012). This Decree followed IMF and World Bank conditionalities, which included the abolishment of state financing of agriculture in return for assistance in several spheres of the economy (VAN ATTA, 2009; WORLD BANK, 1996, 5). However, in order to safeguard the continuation of cotton production, the government established a so-called futurist system for cotton producing farms. This system entailed the provision of "futures" (commodity credits) to cotton producing farms by local cotton ginneries. It thus actually upheld the commodity credit system as inherited from the Soviet command agriculture. At the end of the chain, the cotton was sold to a small number of contracted foreign traders who had been able to enter after formal demonopolisation of the farm sector³¹ (VAN ATTA, 2009; IMF, 2000, 47;

²⁸ Sovkhozoes were renamed into kolkhozoes, as "the government thought that the reintroduction of kolkhozoes would be a way of counteracting privatisation" (BLISS, 2006, 250).

²⁹ The mountainous GBAO is mainly inhabited by Ismaili, belonging to the Shia within the Islam (opposed to most of the population in the rest of the country, who are Sunni). Since the civil war the hereditary imam of the Ismaili, the Aka Khan, has been providing critical aid through his foundation, also in pursuing reforms in the early 1990s.

³⁰ Official statistics do not differentiate different types of *dehqon* farms as defined by law: the collective, family, private *dehqon* farms. In the field moreover differences are often not noticeable, aside from the important note that the larger collective farms are often remnants of former Soviet farms, and their relative large scale has influences statistics on the category of "*dehqon* farms" (fieldwork 2012, 2013; see also LERMAN, 2012).

³¹ The demonopolisation of the cotton sector was designed by foreign consultants brought by the IMF and World Bank (WORLD BANK, 1996). In the early years of reform, these MFIs provided assistance through flying in high numbers of foreign consultants. The World Bank deemed the Tajik governmental officials that had remained after the civil war unable to design and implement reforms (ibid.), which thus clearly exemplifies the susceptibility to external pressure in Tajikistan at that time. In Russia, the situation was entirely different in the early years of reform, where there was a small group of urban Russians, well-trained in neoliberal

fieldwork interviews 2013). The futures tied the formally restructured farms to cotton ginneries – in hands of well-connected elites, and due to farms' inability to produce up to the contracted amounts, the system led to creation and accumulation of cotton debts. The debts were logically concentrated in the cotton producing regions in the Sughd and Khatlon region (LERMAN and SEDIK, 2008; VAN ATTA, 2008; fieldwork 2012 and 2013).

The futures system principally was a way to circumvent the demise of cotton production, and more important, to compensate for state withdrawal from the agricultural sector. The high stake in crop revenues of cotton and other large-scale production systems gave that particularly in the lowlands, where large-scale cotton production dominated, shifts in land users did not take place. The first pioneering individual *dehqon* farmers had to cope in an environment hostile to individual farming, without any support. "In 1996, we got fields without debts, but also without machinery", a *dehqon* farmer who started in those early years told to one of the authors in the field. Others rural dwellers yet, who had prominent positions, were able to start individually with a better starting position. "The smart chairmen, they took their share early, and started before the others. They could pick the best fields" (field notes 2013). The lack of start-up support in Tajikistan is different from the situation in Russia for instance, where early farmers benefited from privatisation schemes with the division of farm assets and cheap credits (VISSER, 2008; WEGREN, 2005).

In sum, the speed and ease of socio-economic developments in the highlands contrast starkly with the situation in the lowlands in the early years of independence, even though the international donor community exerted pressure nation wide³² (see also WORLD BANK, 1996). Given the fact that the mountainous area has only a tiny share in the overall amount of arable land, it is of little significance in national statistics. This makes that the early privatisation in this region is not observed in national statistics. Figure 2 shows that *dehqon* farms had no share in GAO up till the late 1990s (TAJSTAT, 2005).

Household plot production became a pivotal safety net in the years of war (ROWE, 2009; HERBERS, 2006). The upsurge of household plot production compensated partially for the drop in production by larger farms, but the severe fall in GAO after independence did happen. The flexibility of scale of household plot production provided people with adaptive capacity, i.e. ability to cope with changing circumstances and they were less affected by a

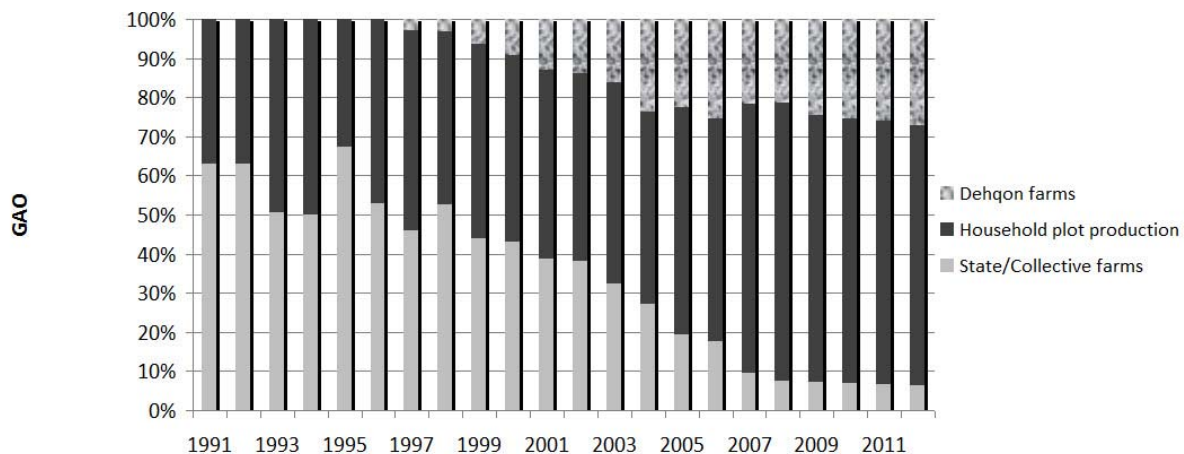
theory to design and instigate economic reforms (see also LOFFE et al. 2006, 116). There was a stark discrepancy between policy makers in Moscow, being adepts of WB dogmas, and the ones implementing reforms on the ground. GIORDANO and KOSTOVA (2001, 10-11) describe how the dogma of decollectivization was enforced by Western experts in Bulgaria, which "was not by all regarded as 'better' since [people] had a bad memory to capitalist agricultural past".

³² BLISS (2006, 320) discusses whether the early restructuring in Badakhshon was endogenous, or if it should be attributed to external pressure. In comparing with a neighbouring district where external pressure remained absent in those years, Bliss concludes that external pressure has been critical in reforming land use patterns. The comparison is however problematic. Exactly the fact that other regions comprise more arable land, makes that these other localities may contain more potential for revenue production, which influences authorities' stance towards reforms. As ROY (1999, 119) also notes: "herders tend to go private more often than cotton growers. One interpretation is that cotton growers are still under state constraints. A closer examination shows that things are more complicated. If we look more closely at the patterns of privatization, we obtain another explanation. Herders more easily go private because there is less irrigated land involved (that is 'real' land)".

demise of input supply³³. The importance of rural household production is clearly observable in figure 2. The government responded to the critical situation in the rural area by granting "presidential land" (*zamini presidenti*) to rural households where land was available (for instance in highlands this was complicated), giving that the expansion of land for household plot production expanded between 1991 and 2000 from total 75.000 hectares to over 170.000 hectares (HERBERS, 2006, 110). According to the Land Code (Art. 71), Tajik households have the right to 0.12 hectare of irrigated land and 0.25 hectare of rain-fed land, in the mountainous areas up to 0.40 hectares of land, which does not include presidential land. The actual size of a household plot people can and do cultivate differs regularly from sizes stipulated by law, and is rather defined by local environmental and socio-economic factors (fieldwork 2012 and 2013).

In the critical years of the war the government furthermore shifted allocation of land from cotton to wheat to guarantee wheat supplies, and the area grown with cereals increased from 1995 to 1997 with almost 50 per cent (LERMAN and SEDIK, 2008, 37). 1995 was also the turn around year after which wheat yields (centner/hectare) started to increase again (ibid.). For cotton the turn around in yields (centner/hectare) was not before 1998 (ibid.).

Figure 2: Structure of GAO per farm type



Source: Authors' compilation based on 1991 and 2007-2012: TAJSTAT, 2013, 16 (comparative prices Tajik Somoni (TJS) 2012).
1992-1997: IMF, 2000, 56: (comparative prices Tajik Rubles 1997) .
1997-2007: LERMAN, 2009, 7.

4.2.2 Phase 2. 1998-2007: Donor influence and window dressing

A substantial share of *dehqon* farms in GAO did not appear before the end of the civil war, as figure 2 shows, and the subsequent agricultural recovery was after 1998. The rural infrastructure, including roads and irrigation systems urgently required rehabilitation and the war had left many fields and houses abandoned.

The ruptures caused by the civil war made the government more susceptible to international agencies and donors³⁴. The World Bank urged for deepening economic reforms after the civil

³³ As LERMAN et al. (2003, 1015) among others describe, in common with highland production systems, households often produce so-called autonomous crops, which are low-input, with which they avoid "the reliance on machinery and equipment".

³⁴ Capital input in the early years of independence was primarily borrowed from FSU neighbouring states, leading to a significant amount of foreign debt, of over 446 Million US dollars in 1996 (WORLD BANK, 1996, 2).

war – providing assistance for a possible "mass privatization program" (WORLD BANK, 1996, 7), and in 1997 the Bank sought to give impetus to further farm restructuring, among others with the Farm Privatisation Support Project (FPSP) in particular pilot areas in different regions, targeting mainly cotton producing farms³⁵ (WORLD BANK, 2006). Encountered with significant governmental opposition to reform, but also hesitancy to farm of rural dwellers, the World Bank provided showcases of in their eyes successful reform, such as Azerbaijan³⁶ (WORLD BANK, 2006, 5). Nonetheless, the privatisation projects continued facing hindrances, as World Bank officials reported in the evaluation of the FPSP: "Still, few officers at the Ministry of Agriculture understand the potential positive impacts of a privatised agricultural sector; numerous information and training sessions and workshops have failed to convince Soviet-trained officers of potential efficiency gains from market forces. For them, the lack of a production plan means that nothing will be produced" (WORLD BANK, 2006, 13). These judgments are yet interpretations with clear ideological connotations, stressing farmers' and authorities' misunderstandings and lack of entrepreneurial mentalities³⁷ (see also CSAKI, 2000, 50 who commented the CIS' lack of will to reform) World Bank staff obviously did not incorporate authorities' political interests in upholding control, or geographical factors in shaping farm structures (this ignorance is also apparent in the farm privatisation scheme purposed in the WORLD BANK 1996 report (1996, 29).

A governmental Decree issued in 2000, detailed that all corporate farms should be restructured by 2005, and a revised Law on Dekhan farms was adopted in 2002, which detailed the terms of *dehqon* farming (ROBINSON et al., 2008). In actuality however, the implementation of these new laws seemed mainly driven by the motivation to secure foreign aid, as the government consequently restructured farms mainly cosmetically (ROWE, 2010, 192). As ROY (1999, 118) also noted about kolkhozes in Tajikistan and Uzbekistan: "States officially approve of IMF injunctions, but fear extensive privatization and usually turn a blind eye on the particular way a so-called privatization has been undertaken. They try to recast imported policies in local structures." A way in which officials pursued change while retaining control, was by transferring large areas to insiders of the governmental elite, which changed the collective label into an individualised one (fieldwork 2013). In several instances, physical shares with title documentation were granted "to farm workers quickly before the 2005 deadline for restructuring loomed" (ROBINSON et al., 2008, 182; fieldwork observations 2013). A similar instance occurred in Russia in the early 1990s (VAN ATTA, 1997, 328/331). In Tajikistan, "even where this process had occurred many families did not receive land as they could not pay for the share titles, did not have enough labour to farm the land or were offered land of poor quality" (ROBINSON et al., 2008, 182).

What thus characterised this phase in the lowlands were the stark divergence between reform plans/stated goals, and the eventual (absent) implementation on the ground,

Significant involvement of the MFIs started in the aftermath of the war. The Central Asian region including Tajikistan gained importance for geopolitical security reasons, particularly after 11 September 2001. Thereafter international donor community has continued to fortify security forces and alliances.

³⁵ In these early years, no NGO or international donor was involved in the cotton sector, except for the World Bank. Nowadays there are still few NGOs working with cotton producing farmers. A pilot project in production of organic cotton has yet started in 2013, initiated by European NGOs.

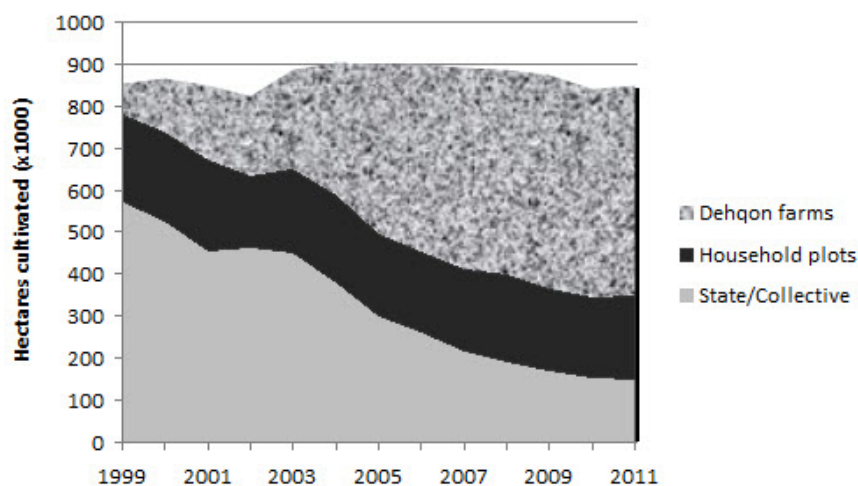
³⁶ YALÇIN-HECKMANN (2010) shows that privatisation in Azerbaijan did not change the continued under-cultivation or low productivity, and reforms were not univocally well received by rural communities.

³⁷ See also ROY (1999, 118) who criticises external donors by describing that "NGOs, the IMF or the European Bank" missed to notice positive signals of Uzbek kolkhoz managers' behavioural changes towards diversifying farm output and liberalising labour regimes, which should have been given support.

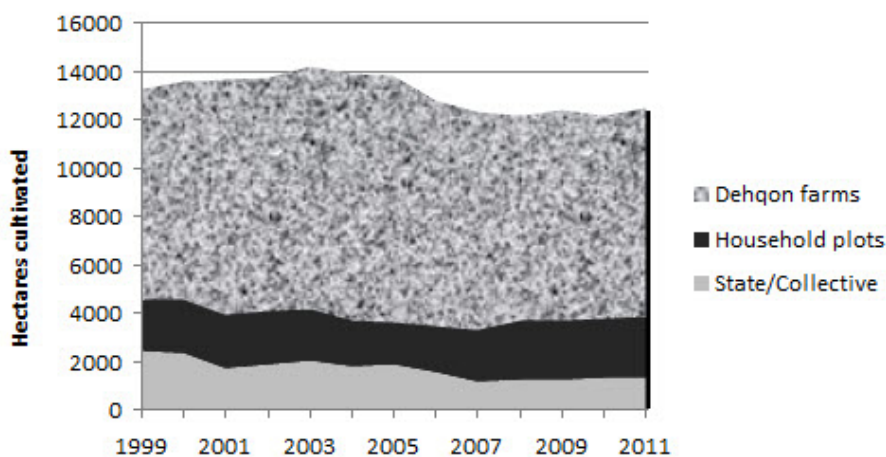
comparable to the situation in the Ukraine in the 1990s. The farm leaders greatly influenced processes of privatisation, to uphold control over agricultural revenues, which was also permitted by the extensive irrigation and waterways.

Opposed to the farm leaders in the lowlands, Soviet farm leaders in mountainous autonomous region were restricted in exerting control. They were frequently appointed for short(er) periods, and in the absence of high revenue crop production, they had less interest to uphold control (see also HERBERS, 2006). This explains also why restructuring of farms in the highlands unfolded rather easy. Redistribution took place per village, in a rather egalitarian way (ibid.). Land and farm assets (including livestock) were distributed to villagers regardless of age, gender, and former employment. Restructuring of former Soviet farmland and farm assets in this part of the country was almost completed already by 1999 (HERBERS, 2006; BLISS, 2006).

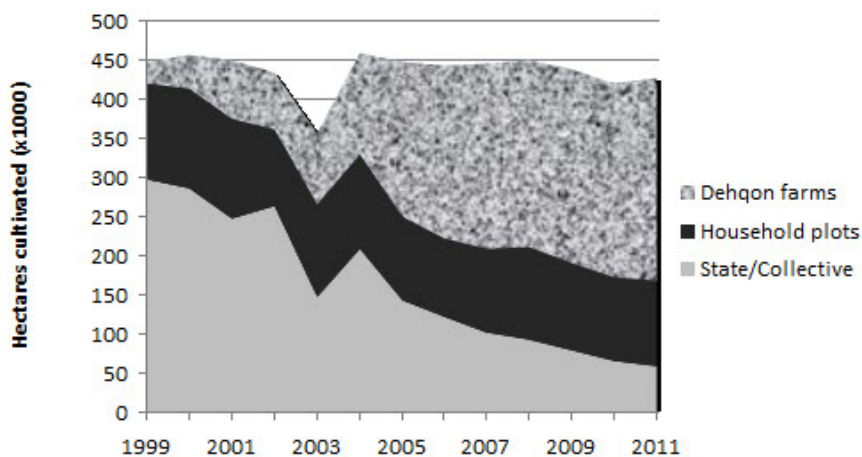
The significant divergence in land use and land use change between the highlands in the eastern part, and the lowlands, is clearly visible in statistics. The mountainous oblast is the only region in Tajikistan where *dehqon* farmers outcompeted household plot production in vegetable production by 1999 (TAJSTAT, 2012). This indicates, for one, the distinctiveness in crops produced in the highland region. Second, it shows that individualisation has progressed quickly. By the year 2000, *dehqon* farms in Gorno Badakhshon were responsible for the cultivation of 66.6 per cent of all arable land, while in the two lowland regions Khatlon and Sughd, *dehqon* farms were only responsible for 9.7 per cent and 17.4 per cent respectively in that year (TAJSTAT, 2005; see also HERBERS, 2006). In the region in the centre of the country, the Region of Republican Subordination, a partially low range mountainous region, *dehqon* farms held 22.6 per cent of land in 2000, while a considerable large share in this region was allocated to household plots, namely 33.9 per cent (TAJSTAT, 2005). Although the numbers might be puzzling, the regionalised character of reforms is visible in comparing the figures 3-5 below; the mountainous autonomous region Gorno Badakhshon was the pioneer ("Spitzenreiter") (HERBERS, 2006, 226) in farm restructuring (see also IMF, 2000; BLISS, 2006).

Figure 3: Land use by different land users 1999-2011 Tajikistan nation-wide

Source: Authors' drawing based on TAJSTAT, 2005; TAJSTAT, 2012.

Figure 4: Land use by different land users 1999-2011 GBAO (highlands)

Source: Authors' drawing based on TAJSTAT, 2005; TAJSTAT, 2012.

Figure 5: Land use by different land users 1999-2011 Khatlon (lowlands)

Source: Authors' drawing based on TAJSTAT, 2005; TAJSTAT, 2012.

4.2.3 Phase 3. 2007-2013: Introduction of market-based policies

A third stage in the process of agrarian change process commenced in 2007. Up till then, many former Soviet farms had continued to function in disguise, principally in the cotton growing areas³⁸. It is important to note that besides the dichotomy between lowlands and highlands that we distinguished up till now, a centre-periphery dichotomy in the lowlands surfaced over the years. In the central districts, particularly near the capital Dushanbe, rural infrastructure continued to be maintained, and farmers and well-connected individuals invest in farming here. The peripheral lowlands further from urban areas experienced more autonomy but also less attention from the state, leading to deteriorating irrigation systems, and consequently signs of severe desertification and salinisation. In these hinterlands, farm debts continued to be a more serious problem, and starting a farm may imply paying a substantial cotton debt (fieldwork 2012 and 2013). It has made rural dwellers preferred to stay working for a larger farm instead of taking the risk of individual farming³⁹, or simply leave the area (ibid).

Over the years the area cultivated by *dehqon* farmers in all regions increased gradually. Nation-wide, the drop in share of land farmed by former Soviet farms was significant between 2006-7. It was a difference of 5 per cent, which can attributed to an increase in land farmed by *dehqon* farmers (from 49.9 per cent to 54 per cent) (TAJSTAT, 2012, 91). Hence, this was the year after which *dehqon* farmers cultivated the major part of land, as they crossed the 50 per cent of cultivated farmland (ibid). From a regionalised perspective, the percentages of land farmed by different types of farms in the autonomous oblast Gorno Badakhshon remained stable after the year 2000 (when already the largest share was cultivated by *dehqon* farmers, see also figure 4). Nowadays, except for the RRP, in all other regions including both lowland regions Khatlon and Sughd, *dehqon* farmers cultivate over 60 per cent of all arable land (TAJSTAT, 2012, 91)⁴⁰.

The year 2007 was particularly important in driving further farm restructuring, since it was a watershed in terms of legislation affecting agricultural producers. The futures system was discredited over the years, which reached a climax by the end of 2007, when debts had

³⁸ Complicating official data is that collective or cooperative farms are sometimes indicated as former kolkhozes; other times they are labelled collective *dehqon* farms, meaning that they are included in the overall *dehqon* farms statistics.

³⁹ This shows that "willingness from below" as factor steering farm individualisation is related to geographical characteristics and the particular local political economy. Some rural dwellers prefer to work individually under an umbrella of a larger collective *dehqon* farm, to access inputs and marketing channels provided for by the overarching cooperative. This was also observed by Mandler (personal communication June 2014) in the mountainous part of the Sughd region where farmers prefer to continue working on a larger collective *dehqon* farm, for reasons like aversion of risk and avoiding individual tax payments.

⁴⁰ An explanation for the variance of the RRP might be that population density is relatively high, meaning that there is limited land to allocate to rural households. A second reason might be that soils in the region are less fertile than elsewhere, implying that there is less potential for profitable farming, leading to more outmigration of male labour force to Russia. The women left behind regularly encounter various obstacles to embark on individual farming. A distinct issue worth mentioning is that the RRP region has since 1992 been known as instable, where dissident voices are centred, and "where sovereignty of the state has remained fragile" (HEATHERSHAW and HERZIG, 2011, 7). This might pursue authorities to abstain from loosening grip and slow down further decollectivisation. Another point is that NGOs are less active in the region. In case they are active their presence is much less visible than elsewhere in the country (fieldwork observations 2013).

accumulated to over 400 million US dollars⁴¹. To solve the debts the government implemented measures and a program to pay off debts, propagated as the "Freedom to Farm decree" (Governmental Decree of the Republic of Tajikistan #111). This decree would imply full freedom for farmers to select crops and would release farmers' dependency and entanglement to cotton ginneries. Notwithstanding the continuation of informal incentives to grow cotton (farmers are frequently visited and checked by district and local authorities, with the aim to secure production of cotton; and farmers face several obstacles in marketing and cultivating other crops (fieldwork 2012 and 2013; see also BOBOYOROV, 2013)), nation-wide change has been taken place over the years in cropping patterns⁴². Cotton increasingly gives way to wheat or other (cash) crops, like melon, onion or sunflower (fieldwork 2012 and 2013). In some instances these alterations of cropping patterns are genuine intentions to develop niche markets driven by long-term strategic considerations⁴³, other times they are rather manifestations of cash shortages (fieldwork 2012 and 2013; also observed by ALLINA-PISANO, 2008 in the Black Earth in Russia/Ukraine; also VISSER, 2008, 141 on Russia).

In 2007 the World Bank expanded its assistance in registering land usage, entailing further restructuring of larger collective *dehqon* farms (LERMAN, 2012). This again exemplifies the major role of the World Bank in steering reforms in Tajikistan – in some periods the Bank issued larger numbers of user certificates (free of charge) than the State Land Committee and Geodesy did. Moreover, since 2008 the international donor community is pursuing reforms through the establishment of the working group for agricultural and water reform as part of the donor coordination council (FAO n.d.). A red thread throughout donor assistance in agriculture has been to develop the rural farm sector towards a more commercially, market driven sector. These developments have not changed course over the years, despite the fact that other states, such as the Chinese, have become important donors in the past few years.

In 2012 the government introduced the *tradability* of land use rights. This should better farmers' access to credit, farm inputs, and flexibility to deal with land. Furthermore, the Ministry of Agriculture launched a programme, which includes the goal to establish farm cooperatives to serve at least 70 per cent of all farmers by the year 2020. These recent changes are designed under assistance of the donor council, but due 2013 not in effect. While having a potential to improve *dehqon* farmers' situation, both reforms could also have clear adverse effects. For one, the twined implementation of establishing service cooperatives and the introduction of a land market could lead to pooling of smallholdings and thus concentration of land by well-connected farmers. Concentration in land holdings is not adverse in itself, but it is, when it happens at the cost of opportunities of small farms. The consolidation of farms after earlier fragmentation is something what happened in Uzbekistan in 2008 under government intervention. Second, the new law on cooperatives could serve as a tool to control farmers. Many officials long to re-establish control, as a

⁴¹ Besides the accumulation of debts, the IMF discovered and proclaimed that "Tajikistan had been systematically misleading the Fund about the status of its hard currency reserves in order to provide covert state financing to the cotton sector" (VAN ATTA, 2009, 19), in which several persons within the Tajik were involved.

⁴² The area in cotton dropped by more than 40 per cent between 2005 and 2010, while the area in horticultural crops (potatoes, vegetables and melons) increased by 40 per cent (LERMAN, 2012, 15, see also TAJSTAT, 2012).

⁴³ Already in Soviet times "strategic choices in terms of production were not devoid of a political dimension" (ZEVACO, 2014, 167). Introduction of crops (deviating from the stipulated cultivation) by kolkhoz workers were, according her, "attempts to oppose the kolkhoz system as a whole".

governmental official expressed the problem of overseeing farmers: "in the past, it was easy. There was one *rais* (farm chairman) who directed everyone. Now, there are 400 *rais*, (with which he meant to say that there are now 400 farmers who make their own decision). (..) "and there is no one to [to direct them and to gather them for meetings]" (interview fieldwork August 2013).

Collective or cooperative farming often has a negative connotation among advocates of neoliberalism and free market economies (see also RABINOWICZ and SWINNEN, 1997, 11). LERMAN (2012, 7) mentioned the "hidden reserve of land that is in hands of collective *dehqon* farms" in Tajikistan, as a kind of "to-do" item which still had to be divided in the course of agrarian reform. As correctly noted however by SWINNEN and ROZELLE (2006, 172-73) (see also RABINOWICZ and SWINNEN, 1997, 11; VISSER, 2008; LAMPLAND, 2002), collective or cooperative farming can truly benefit farmers; it depends on the conditions and context within which it is taking place.

4.3 Reforms revisited

In this part, we want to summarise the overall developments in agrarian change in Tajikistan. In the final conclusion that follows below, we place Tajikistan in the FSU by addressing patterns of similarities and differences.

After 20 years of independence in Tajikistan, *dehqon* farmers cultivate the largest share of land nowadays. At the present, the rural sector includes around 750.000 rural households with an average household plot of 0.3 hectares, and around 90.000 *dehqon* farms with an average size of 7 hectares arable land⁴⁴ (LERMAN, 2012, 3).

Our focus and interest has however rather been on the *process* of reform, i.e. on the way in which the current situation came into existence, rather than on absolute numbers. We have sought to address the divergences in agricultural reforms throughout the country, and the polarisations that appeared throughout the process of agrarian change. Of course in many countries there is regional variance, with different farm sizes and cropping patterns. However, Tajikistan stands out due to stark regional divergence and the lack of one dominant agricultural model and trajectory, as if the government has not opted for one "ideal" path, or farm model.

The regional divergences that emerged in reforms in Tajikistan are part and parcel of the political economies in place, related to the crops confined in the particular geographic zones. Throughout the years, state and elites have been primarily centred on lowland agriculture, rather than on highland agriculture, and formed obstacles to change production relations. The revenues from cotton, grown on one third of arable land in 1991, in fact modelled farm restructuring in the lowlands to a large extent. The importance of this crop for the national economy, the state and elites, has triggered authorities' strive to control or directly acquire large areas of land and farm assets in the principal lowland regions Sughd and Khatlon.

In areas where agriculture was less profitable, the state gradually divested over the years, and in the highlands, Gorno Badakhshon, and partially the RRP, where farming and rural livelihoods are traditionally oriented to horticulture, fruit trees and livestock, this gave that reforms already took place in rather spontaneous ways directly after independence in the early

⁴⁴ Yet as LERMAN (2012, 3) rightly remarks: in reality most *dehqon* farms are around 5 hectares. The average number is misleading due to larger size collective *dehqon* farms.

1990s. The lack of high revenue crops and distance to market outlets made that authorities had less interest in and less ability to control the process of reform.

The role of the state has changed from an apparent coercive role, towards a less coercive, though still dominant role, in varying degrees within the country's regions. One could say; reforms have travelled far in official and policy discourse, but on the ground manifold challenges remain. These findings lead us to the last part, in which we come to understand broader patterns of agrarian change.

5 Conclusion: Towards a deeper understanding of trajectories of agrarian change

Where should we place Tajikistan in a large frame? In hindsight, Tajikistan seems to represent a microcosm of agricultural trajectories within the former Soviet Union, where the mountainous parts resemble the Caucasian geography, cropping pattern, and farm restructuring (foremost spontaneous, quick individualisation). To the other extreme, the lowland cotton areas resemble, in a softened version, the state-controlled command system given in by high revenue crops plus the extensive irrigation systems, as observed in Turkmenistan and Uzbekistan (VELDWISCH, 2008; TREVISANI, 2010), or might compare to some extent with Russia's prolonged large scale agricultural structure.

Since the aftermath of Tajikistan's independence and civil war, the crops confined in particular geographic zones brought into play particular political economies. These political economies at the same time have been subject to external pressure. Under pressure of the international donor community, the government, poor in resources, had only little manoeuvring space to model farm restructuring in its own manner or continue the status quo. The same situation was seen in resource poor mountainous Kyrgyzstan, and Georgia, which became relatively dependent on injunctions from ("Western") international actors, driving these states to more neoliberal economies. This is opposed to the more resource rich neighbour Uzbekistan as well as Turkmenistan or Russia nowadays, which are much more independent, and self-confident because of their resource revenues (cotton, oil, gas). They are so able to abstain from outside pressure.

What makes the case of Tajikistan distinctive is the stark regional variety in reforms, plus the fact that there is not one dominant agrarian pattern emerging. We explain the variations in the unfolding of agrarian transformation in Tajikistan by the regional geographic characteristics which affected the way in which individualisation did or did not take shape. The kind of geographically defined process of reform was also – though less explicitly – observed by KEGEL (1991) in Georgia.

In Tajikistan the differences between highlands and lowlands are of apparent magnitude. The high and inaccessible mountains, characterised by altitudes up to almost 8000 metres above sea level, actually never allowed for large-scale agriculture, and dictated production units that are scattered and have to function autonomously. Statehood is fragmented in these outskirts, where centralised procurement is constrained. The ignorance of the state towards smaller scale individual farming in the early years of independence eased the spontaneous reform in the mountainous areas. On the ground privatisation took place, sometimes ahead of reform plans. In the state-prioritised lowlands, regime insiders delayed reforms for long, to control income of crop revenues, which was (also) permitted by the large-scale production systems.

Hence, this article has taught us that agrarian change – in Tajikistan, but in a wider context definitely too – is highly influenced by the geography in place, and the political economy that develops within a particular setting. Bearing in mind this interplay, reform schemes and theories on transition should extend policy analyses beyond neoliberal dogmas, and instead incorporate local geographic characteristics to avoid false expectations and failed implementation.

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