

PERSONAL NETWORKS OF AGRICULTURAL KNOWLEDGE IN THE COTTON-GROWING COMMUNITIES OF SOUTHERN TAJKISTAN

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Abstract: According to the media and some journal articles, powerful state actors and institutions play an exclusive role in maintaining the cotton economy, which is the dominant agricultural sector in Tajikistan. This understanding shapes a binary division and opposition between central and local actors and between imported and indigenous knowledge. This article discusses the case of agricultural knowledge in the cotton sector to show how the existing personal networks influence the institutional rules and norms of knowledge transfer and exchange. These personal networks shape the interactions and alliances of agricultural actors, including masters, elders, religious notables, state authorities and international specialists. They also dominate development missions in the agricultural sector and determine the institutional performance of the state.

This article investigates the role personal kinship and patron-client networks play in the generation, exchange and transfer of agricultural knowledge. It examines the elite-run cotton economy in the Shahritus District of Khatlon Province, which is located in the south-western region

of Tajikistan. The province accounts for around 17 percent of the country's area and about 35 percent of its 7.3 million population. The rural inhabitants of the province constitute 83 percent of its overall population.¹

In the pre-Soviet period, the subtropical lowland areas of Khatlon province were sparsely inhabited by native Tajiks and nomadic and semi-nomadic Uzbeks and Arabs. After World War II, the government began irrigating about 320,000 hectares of land in the province, subsequently changing it into one of the central cotton-growing regions of the Soviet Union.² Due to a lack of manpower for the expansive new cotton plantations, the government relocated people to the farms from the mountainous communities of eastern, central and northern Tajikistan, as well as the Ferghana valley and the south-eastern parts of Uzbekistan. As a result, the central and south-western districts of the province, where I conducted field research,³ constitute ethnically heterogeneous communities of Tajiks, Uzbeks, Arabs, Turkmen, Kyrgyz and others.⁴

The Soviet government established land and other agricultural resources as state properties and thereby employed peasants in the state-run cooperative enterprises and collective farms (*kolkhozes* and *sovkhozes*). In lowland areas, such as the Khatlon province, the collective farms were specialized in certain crops. Cotton mono-cropping was one such form of production that was expected to mobilize peasants as a unified economic and social class. The main purpose was to prevent the rural population from engaging in the private ownership of agricultural resources and limit their personal access to the market economy, thereby distinguishing them from the working class. There were allowed only kitchen gardens (*tamarqa*), which they mainly used for their subsistence needs. However, these attempts did not develop the class structures and relations that the Soviet leaders expected, but they nevertheless had an impact on personal

¹ Government of Tajikistan. 2007. *The Cotton Sector of Tajikistan. New Opportunities for the International Cotton Trade*. At http://siteresources.worldbank.org/INTTAJIKISTAN/Resources/MB_300407_E.pdf (accessed February 22, 2012), 5.

² *Ibid.*

³ The qualitative data have been collected through social-anthropological field research since January 2012 which complements my PhD thesis on "Kinship and Islam: The Role of Collective Identities in Shaping the Institutional Order of Patronage in Southern Tajikistan." The current field research has been implemented with support from the Center for Development Research of Bonn University in the framework of its two research projects—one on "Conversion of Knowledge in Post-Soviet Agriculture: The Impact of Local Governance on the Knowledge Management of Agricultural Actors" (funded by the Volkswagen Foundation for the period 2011-13) and the other on "Epistemic Cultures and Innovation Diffusion in the Post-Soviet Southern Caucasus and Central Asia." A pilot study on "Agricultural Knowledge Systems in Georgia and Tajikistan" was funded by the Federal Ministry of Education and Research of Germany.

⁴ For a discussion of forced population transfers during the Soviet Union, see Oliver Roy. 2011[2000]. *The New Central Asia. Geopolitics and the Birth of Nations*. New York: I.B. Tauris, 96-7.

relations by either maintaining or transforming them. The state elites became actual or “administrative” owners of state properties, while the workers of the collective farms accessed these properties and, in exchange, became personally indebted to the elites.⁵ Consequently, the Soviet institutions were transformed into personal networks of kinsmen, peers and patrons-clients.

A similar system of property relations based on personal networks has survived throughout the existence of post-Soviet Tajikistan. Shortly after the collapse of the Soviet Union, the state elites struggled to divide state power, resulting in the 1992-97 civil war. Legal reform and the redistribution of land and other agricultural resources started in 1991 and proceeded in an arbitrary manner through the civil war. The final stage of the land reform (1997-2005) reinforced state ownership of agricultural resources, making it the defining principle for property relations.⁶ Even the introduction of “stakeholder rights” (*sahmdori*), with central regulation of the land reform,⁷ could not establish equal rights to state properties, including land. Most people have full rights only to their kitchen gardens and to some supporting land plots (*presidenti*⁸). This institutional condition

⁵ Katherine Verdery. 2004. “Property and Politics in and after Socialism.” In Joan Vincent and David Nugent. eds., *A Companion to the Anthropology of Politics*. Oxford: Blackwell, 22-3, 30.

⁶ USAID. 2004. *Land Reform and Farm Reorganisation in Tajikistan*. USAID Tajikistan: Associates in Rural Development (Policy Issues Paper); Soren W. Nissen. 2004. “Tajikistan’s Land Reform Programme: Sowing the Seeds of a Brighter Future.” *OSCE Magazine* 1: 3 (July): 4-12, http://www.ppl.nl/ebooks/files/3343_en.pdf (accessed November 12, 2011); Law of the Republic of Tajikistan 2005 [2002]. “On Dehqan (Farmer) Farms”. *OSCE* (Dushanbe) 48; Obie C. Porteous. 2009. “Land Reform in Tajikistan.” www.fex.ennonline.net/24/landreform.aspx (accessed March 21, 2012); Government of Tajikistan. 2011. *Hukumati Jumhurii Tojikiston, Barnomai islohoti kishovarzii Jumhurii Tojikiston. Hujjati jam’basti* [Program of Agricultural Reform of the Republic of Tajikistan. Concluding Report and Document] (April 15). Dushanbe: Government of Tajikistan; Government of Tajikistan. 2007 (April). *The Cotton Sector of Tajikistan. New Opportunities for the International Cotton Trade*, http://siteresources.worldbank.org/INTTAJIKISTAN/Resources/MB_300407_E.pdf (accessed February 22, 2012).

⁷ According to the Law of the Republic of Tajikistan “On Dehqan (Farmer) Farms” (2005 [2002] *OSCE* 48) and its further amendments (cf. USAID. 2004. *Land Reform and Farm Reorganisation in Tajikistan*. USAID Tajikistan: Associates in Rural Development. Policy Issues Paper), all rural inhabitants, both men and women, have proprietorship rights to equal amounts of land and other resources, including public properties of the former sovkhov/kolkhoz.

⁸ 75,000 hectares of arable, so-called “*presidenti*,” land plots were distributed twice—on the bases of Decrees of the President of the Republic of Tajikistan No 342 in 1995 and No 874 in 1997 for wheat production and the food security of the individual households (Government of Tajikistan. 2011. *Hukumati Jumhurii Tojikiston, Barnomai islohoti kishovarzii Jumhurii Tojikiston. Hujjati jam’basti* [Program of Agricultural Reform of the Republic of Tajikistan. Concluding Report and Document]. Dushanbe: Government of Tajikistan, 39). It was formally titled as “support” (*yorirason*) land resource for the households who did not have more than 15 *sotikh* (0.15 hectares) of household yards (*tamarqa*) for agricultural activities.

has reaffirmed the elites' administrative rights to agricultural resources and activities and has consequently intensified reciprocal and landlord-tenant relations between them and the rural population.

Since the fall of the Soviet Union, the share of Tajikistan's agricultural sector in the country's overall GDP has fallen sharply. According to official reports, the contribution fell from 37 percent in 1991 to 18 percent by 2008, even while the sector continued officially to employ two-thirds of the total population. At the same time, agricultural products constituted one-fifth of exports and 39 percent of tax revenue in 2008. Raw cotton accounted for 17.3 percent of total export revenue in 2004. The recovery and growth of the cotton sector in the post-civil war period have also increasingly absorbed the country's land and water resources. The sector exploits 45 percent of the country's 0.8 million hectares of arable land and 75 percent of the labor force in the cotton-growing communities.⁹ Since it does little to contribute to the well-being of individual families, the sector is closely associated with inequality and poverty. The World Bank asserts that "in Tajikistan almost three-quarters of the extreme poor live in cotton-growing areas."¹⁰ To contribute to the reduction of the poverty rate in rural areas, therefore, the reform activities of the Tajik government, World Bank, Asian Development Bank and other development institutions, have focused on land privatization within the cotton sub-sector in the post-civil war period.¹¹

Despite this situation, however, cotton shapes the national political economy of the Tajik state.¹² As the government has stated officially, "cotton is not only an important crop for our Republic; it is entwined with our history and with the lives and future of our people."¹³ The proclaimed land reform and the liberation of agricultural enterprises did not abolish

The allocation of 3 *sotikh* per family member was set for Sayyodi villagers although further land resource and demographic shifts, such as the increase in population and households, and internal and external migrations, were not taken into account (Hamroev Ghayratsho. 2007. Interviewed by Hafiz Boboyorov. Shahritus District. December 7).

⁹ Government of Tajikistan. 2007 (April). *The Cotton Sector of Tajikistan. New Opportunities for the International Cotton Trade*, http://siteresources.worldbank.org/INTTAJIKISTAN/Resources/MB_300407_E.pdf (accessed February 22, 2012), 5-8; SOAS. 2010. *What Has Changed? Progress in eliminating the use of forced child labour in the cotton harvests of Uzbekistan and Tajikistan*. University of London: Centre for Contemporary Central Asia and the Caucasus, School of Oriental and African Studies. <http://www.soas.ac.uk/cccac/centres-publications/file64329.pdf> (accessed January 23, 2012), 6-7, 23.

¹⁰ In SOAS. 2010. *What Has Changed? Progress in eliminating the use of forced child labour in the cotton harvests of Uzbekistan and Tajikistan*, 23.

¹¹ Government of Tajikistan. 2007. *The Cotton Sector of Tajikistan. New Opportunities for the International Cotton Trade*, 6.

¹² SOAS. 2010. *What Has Changed? Progress in eliminating the use of forced child labour in the cotton harvests of Uzbekistan and Tajikistan*, 6.

¹³ Government of Tajikistan. 2007. *The Cotton Sector of Tajikistan. New Opportunities for the International Cotton Trade*, 4.

the elite-run institutions and practices which prioritize and monopolize the cotton economy. Today the elites of the central state and their privately-owned investment—so-called “futures”—companies monopolize the cotton sector. The futures system ostensibly operates to solve “the immediate problem of providing farmers with the basic means of production,”¹⁴ but in fact serves to perpetuate elite control.

The cotton elites dominate the key cotton enterprises and infrastructure (including collection stations, cotton plants and agricultural machines), as well as the domestic and international raw cotton markets. The attractiveness of the cotton economy for Tajikistan is that cotton is the only crop which the country can sell in international markets and which, therefore, generates benefits for the elites.¹⁵ These elites have to rely on a network of client farmers and personal networks within the cotton communities because the majority of rural families do not have economic incentives to work on cotton farms and would not do so unless they were coerced to some extent and deeply embedded in networks through which they exchange their labor for access to administrative resources. Consequently, the client farmers run the cotton farms of their kinsmen, neighbors, peers and religious communities, relying on their various connections to provide the necessary laborers.

This situation also shapes and enforces personal networks as the main source for transferring and exchanging important knowledge about agricultural crops and services. Personal networks, in turn, maintain key factors of knowledge transfer and exchange, ensuring that knowledge is passed along kinship and patron-client networks, workers remain loyal to the cotton economy, and the system continues to maintain the necessary status and skills required to bolster social and political stability. The empirical section of this article discusses the practices for acquiring agricultural knowledge. The status of the recipient and his personal relation to the bearer of knowledge ensures his direct and intensive training as well as the establishment of his reputation and trust among the local population. The cotton elites rely on these intermediaries to run cotton farms because of their ability to maintain social and political stability. Most crucial is the knowledge, such as the status and skills needed to influence and coerce workers to maintain the stability of political and economic relations in the cotton sector. The article discusses the personalistic practices which maintain the primitive cotton-growing system and substantially reduce the role of more advanced technical knowledge about cotton growing and marketing.

Part one of the article outlines the theoretical framework employed

¹⁴ *Ibid.*, 8.

¹⁵ International Crisis Group. 2005. “The Curse of Cotton: Central Asia’s Destructive Monoculture.” *Crisis Group Asia Report* 93 (February 28).

and reflects upon the use of network theories in understanding social and economic relations. Here I define the concept of “network society” and elaborate on the network-based sharing and transfer of agricultural knowledge. Such knowledge, including its traditional types, is not power-neutral, but rather serves as a political resource for maintaining personal networks.

Part two discusses how different types of agricultural knowledge are intertwined. This analysis criticizes the general assumption that local knowledge is politically neutral and often horizontally shared among community members and therefore isolated and excluded by some external actors, including state agencies.¹⁶ Here I discuss the role of local masters or the bearers of local agricultural knowledge. These local masters include experienced or knowledgeable and powerful peasants (*tajribador*), heirs of traditional agricultural, construction and ceremonial professions (*usto*), family elders, religious notables (such as *hoji* or pilgrims and *eshon*) and reputable women. Due to their status among the local population and personal relations with state authorities, therefore, these masters own and run important agricultural resources and enterprises, including cotton farms.

Part three discusses the case of cotton monoculture which is monopolized by state elites. The state elites can only maintain their monopoly over the cotton sector by relying on their cliental masters, who are often the former elites of Soviet agricultural enterprises, family elders and religious notables. Often these masters establish and lead the cotton farms of their kinsmen, neighbors, descent groups and other related people. To enforce these network-based agricultural enterprises, they also dominate local political structures, such as *mahalla* committees,¹⁷ which reinforce kinship and patron-client relations in the cotton sector.

The final section is about the agricultural extension services of local and international NGOs. In the study region, many international donor organizations and their local partners offer extension services to individual farmers. These services are primarily devoted to the fair and transparent distribution of professional knowledge and technologies related to soil, seeds, fertilizers and agricultural machines. The discussion considers how the services are embedded within the personal networks of the farmers and the NGO employees.

Personal Networks of Agricultural Knowledge

The proponents of network theories try to understand how a society works to overcome social differentiation based on clear-cut boundaries

¹⁶ E.g., Caleb Wall. 2008. *Argorods of Western Uzbekistan: Knowledge Control and Agriculture in Khorezm*. Berlin: Lit Verlag.

¹⁷ Mahalla Committee or Mahalla is the village-level semi-governmental political structure combining traditional and state authorities.

of communities, groups and classes. Any personal ties among kinsmen, neighbors, peers, descent or ethnic groups, religious communities, and patrons and clients shape the crosscutting networks of interactions at different levels. These networks are not reduced to primordial ties, such as ethnicity and caste, and also scramble class relations, since they link rich and poor.¹⁸ Scholars describe social and economic stratification as being weak due to the unstable status of the people involved in these interactions, pointing, for example, to property owners and laborers in patron-client networks.¹⁹ This weakness of class identity is apparent in the definition of networks for co-opting and muting resistance to increasingly unfair labor practices by large landowners. In such a system “people of disparate status, wealth, and power are vertically integrated below patrons who in turn may be clients of patrons at higher levels.”²⁰

These scholars agree upon the shared structural features of various networks, like “hereditary ties between families, mutual trust, confidence, mutual expectations, community support of values, and the conception of a moral bond.”²¹ To minimize the profusion of terminologies and concepts, scholars adopt the term “patron-client network” to simplify their analysis. When they talk about patron-client networks, they describe any type of relationship based on reciprocity. For some scholars, patron-clientelism implies economically and politically valuable and calculated relations.²² From this angle, a patron-client relationship consists of “networks of dyadic relations centered on power figures, the patrons, who control resources essential to the survival and well-being of dependent groups, the clients.”²³

To frame my theoretical approach, however, I do not limit myself only to the rational calculation of relations or to a simple division between state and non-state actors, but rather suggest that agricultural actors interact along their personal networks. The personal networks of kinsmen, neighbors, peers, colleagues and so on shape loyalty, clientelism and tenancy as the main attributes and incentives for interactions among the agricultural actors, including farmers, their local and state mediators, and international development organizations. In part, the formal institutions of the state

¹⁸ Barry H. Michie. 1981. “The Transformation of Agrarian Patron-Client Relations: Illustrations from India.” *American Ethnologist* 8: 1 (February): 23; Evelyn Blackwood. 1997. “Women, Land, and Labor: Negotiating Clientage and Kinship in a Minangkabau Peasant Community.” *Ethnology* 36: 4 (Autumn): 278.

¹⁹ *Ibid.*, 286; Howard F. Stein. 1984. “A Note on Patron-Client Theory.” *Ethos* 12: 1 (Spring): 30-6.

²⁰ Michie, 23.

²¹ Michie, 24.

²² John P. Mitchell. 2006. “Patrons and Clients.” In Alan Barnard and Jonathan Spencer, eds., *Encyclopedia of Social and Cultural Anthropology*. London and New York: Routledge: 416-8.

²³ Michie, 23.

and the development programs of the international community serve as patronage structures and resources for the personal networks. Similarly, the networks shape the dominant patterns of generation and transfer of certain types of agricultural knowledge, for example, of how to prepare land, where to purchase seeds, or how much fertilizers to apply and when. The involved actors sustain these patterns, which, in turn, favor the masters (farmers and mediators) of the cotton economy.

Without considering the interrelations between the local and external (e.g., state and international) sources of knowledge, however, some scholars²⁴ are inclined to distinguish between the two. Accordingly, local knowledge is “locally and culturally situated knowledge that was and still is produced in local communities.”²⁵ This belief leads international development agencies to wish to bypass and exclude state actors and institutions, focusing their programs on the sources and bearers of “local knowledge.”

In the case of Uzbekistan, Wall²⁶ argues that local agricultural masters (including experienced peasants and farmers) practice horizontal sharing of knowledge about the subsistence economy and adaptation to local conditions. In this sense, a village community may shape a horizontal “knowledge network,” where the masters serve as central nodes, or as “knowledge brokers,” which connect between individuals. Wall maintains that the masters offer their agricultural knowledge without economic benefit or political loyalty in return. He explains that the increasing inequality in transfer and exchange of agricultural knowledge happens because some actors exploit others, rather than the local “knowledge networks.” Since the Soviet era, the state actors have excluded the local masters or traditional “knowledge brokers” from the generation and exchange of agricultural knowledge. He introduces the notion of “knowledge control” to suggest that the Uzbek state keeps in place the Soviet-created “closed system of knowledge” not only to maintain “control over the economy and agricultural production, but also to legitimate its political exercises.”²⁷ The state’s centralized control or “hegemonic power,” he argues, makes it the main generator and exchanger of agricultural knowledge, while reducing the role of both state universities and local masters in the creation of new types of knowledge.

²⁴ Hans-Dieter Evers and Caleb Wall. 2006. “Knowledge Loss: Managing Local Knowledge in Rural Uzbekistan.” *ZEF Working Paper Series* 15. Bonn: Center for Development Research, Department of Political and Cultural Change; Christoph Antweiler. 1998. “Local Knowledge and Local Knowing. An Anthropological Analysis of Contested ‘Cultural Products’ in the Context of Development.” *Anthropos* 93: 469-94; Caleb Wall. 2008. *Argorods of Western Uzbekistan: Knowledge Control and Agriculture in Khorezm*.

²⁵ Antweiler, 490.

²⁶ Caleb Wall. 2008. *Argorods of Western Uzbekistan: Knowledge Control and Agriculture in Khorezm*,. 136-7.

²⁷ *Ibid.*, 5, 24, 261-70.

To explain other types of existing local knowledge and their deviances from state control, Wall refers to such notions as “coping strategies”, “cooptation” and “knowledge loss.”²⁸ For example, a coping strategy is the farmers’ accumulated social knowledge about how to avoid certain aspects of government regulations. Knowledge loss is related to the important actors who either abandon certain types of knowledge or are not able to transfer their knowledge to others.²⁹

This actor-oriented or state-centrist approach necessarily draws contrasts between local types and imported (e.g., state-run) types of agricultural knowledge. The state actors and structures are regarded as external to local communities. Therefore, the proponents argue that the empowerment of local masters extends their role as knowledge brokers, an advisory role they fulfill in their communities.³⁰ They are believed to locate their agricultural knowledge beyond the effects of power relations. Rather they distribute their knowledge and experience through horizontal transfers to members of their communities regardless of the recipients’ status or position.

Local Masters and Networks of Agricultural Knowledge in the Cotton Sector

The division between local and imported (such as instructive and expert) knowledge systems, however, does not fully explain the interrelations of the actors and institutions at various (local, provincial, national and international) levels. As this study of the cotton-growing communities shows, the local masters are not powerless or neutral actors, but rather act in favor of the central state elites. They mediate between the elites and the ordinary people by offering some agricultural knowledge to the latter about aspects of the subsistence economy, such as soil, seeds and fertilizers. There is a necessary connection between the production of any type of knowledge and the exercise of any type of power. Agricultural knowledge is utilized only when it is integrated with other types of knowledge, such as strategies for developing and maintaining kinship, religious and patron-client relations through cotton farms.

Such interrelation of power and knowledge, therefore, elevates the

²⁸ Ibid., 16, 23.

²⁹ Norman Long. 1992. “Introduction.” In Norman Long and Ann Long, eds., *Battlefields of Knowledge. The Interlocking of Theory and Practice in Social Research and Development*. London: Routledge; Solvay Gerke and Judith Ehlert. 2009. “Local Knowledge as Strategic Resource: Fishery in the Seasonal Floodplains of the Mekong Delta, Vietnam.” *ZEF Working Paper Series* 50. Bonn: Center for Development Research, Department of Political and Cultural Change.

³⁰ Hans-Dieter Evers and Caleb Wall. 2006. “Knowledge Loss: Managing Local Knowledge in Rural Uzbekistan”; Caleb Wall. 2008. *Argorods of Western Uzbekistan: Knowledge Control and Agriculture in Khorezm*, 129.

successful masters into the clients and the mediators of the cotton elites. To use the local networks for the benefit of the cotton economy, the elites rely on the local masters, including trained agricultural specialists (agronomists), foremen (*brigadirs*), construction and ceremonial masters (*usto*³¹), state employees (bureaucrats, teachers and doctors), family elders, religious notables (*hoji*, *eshon*) and reputable women. In the Sayyod village—a cotton-growing settlement of about 4,500 people in Shahritus district—where I have been conducting anthropological research since 2007, the key masters include *Usto* Shams (gardener, lemon-grower, master of grain seeds, seedlings and flowers, carpenter), *Usto* Nazar (bee-keeper, potato-grower, carpenter, construction master), *Qamar-brigadir* (*brigadir* since the Soviet Union), *Hoji-Quli* (religious pilgrim), *Polon-aka* (agronomist and extended family elder), *ShU* (female *brigadir* since the Soviet Union) as well as trained agronomists, including Safar Rahimov, Normat Shoev, Kholmurod Juraev and Haydar Ghulomov.³²

Often the masters represent and lead their extended families, *qawms* (descent or ethnic groups), neighbors and religious circles through local state and traditional structures, like *jamoat*,³³ *mahalla* and mosques. Such representation is necessary to sustain cotton-growing farms and *brigadas*³⁴ out of the individual extended families, neighborhoods and *qawms*. Since agricultural experts (such as “experienced” peasants, former *brigadirs* and trained agronomists) cannot always represent their solidarity groups or the members of their cotton farms, therefore, other nonagricultural masters, like family elders, *hojis*, teachers, doctors, state bureaucrats and reputable women also run cotton farms (see Table 1). For this reason agricultural mastership is not always determinant and male-dominated, as Wall³⁵ observes in the case of Uzbekistan. There are also publicly acknowledged female masters who mobilize the majority of the female laborers in cotton-growing farms.

The main quality of the agricultural masters is not their professional knowledge. Rather, they have the ability or experience to use their or others’ agricultural knowledge to maintain the existing power relations among the local population. Hence, mastership characterizes both the possession of indigenous and professional knowledge of agriculture and especially the ability and status to shape the solidarity of the local people for economic and political practices and structures. Such qualities are

³¹ *Usto* literally means “master.”

³² The names have been changed.

³³ *Jamoat* is the sub-district local government structure which unifies several rural settlements.

³⁴ *Brigada* is Russian word for the working teams of the Soviet kolkhoz as well as of the current collective farms.

³⁵ Caleb Wall. 2008. *Argorods of Western Uzbekistan: Knowledge Control and Agriculture in Khorezm*,. 99.

generally defined by the local idioms as “experience” (*tajriba*) while the masters are, thus, called “experienced” (*tajribador*).

Table 1: Professions and Personal Networks of the Farmers

Farmer	Profession	Network
Kholmatov Panjshanbe	Tractor driver	His brother is an agronomist; he belongs to the patron-client network of the cotton elites
Rahimov Nazar	Agronomist	His father is chief agronomist of the district
Shoista Mahmudova	The secretary of the collective farm	Patron-client network (cotton elites), belongs to the dominant ethnicity which shapes local cotton elites
Salom Kajoev	Welder	Belongs to the dominant ethnicity which shapes local cotton elites
Sharipova Munira	The head of the Women’s Council of the collective farm	Patron-client network with the cotton elites
Muhiba Aliyeva	The cook of the village school	The status to mobilize female workers from her extended family and neighborhood
Tuhfa Eshmatova	The secretary of the district government	Patron-client network with the cotton elites
Latifa Mamadrajabova	<i>Brigadir</i> (head of <i>brigada</i>) of the kolkhoz	The status to mobilize female workers from her extended family
Yusuf Muminjonov	Railway worker	The status to mobilize workers from his extended family

Ravshan Mirzoev	Bus driver	Sister is involved in the patron-client network of the cotton elites; the status to mobilize workers from his extended family
Rafiq Kholmurodov	Labor migrant	The status to mobilize workers from his extended family
Kholmat Toshev	Driver	The status to mobilize workers from his extended family
Zafar Hamidov	Kolkhoz worker	The status to mobilize workers from his extended family
Sharifmo Mahmudova	Kolkhoz worker	The status to mobilize female workers from his extended family
Rasul Nazarov	Business man	Belongs to the patron-client network of the cotton elites
<i>Hoji Ghulomboy</i>	Both a religious pilgrim and a former <i>kolkhoz</i> elite	Belongs to the patron-client network of the cotton elites through the family network of the Cotton Hero; the most reputable elder of Uzbek families and <i>qawm</i> in the village
SQ	<i>Brigadir</i> (head of the Sayyod Collective Farm)	Belongs to the patron-client network of the cotton elites through the president's People's Democratic Party; District People's Deputy
ShU	Female <i>brigadir</i>	Belongs to the patron-client network of the cotton elites through inclusion in the list of the district governor, provincial governor and the president

These experienced masters run cotton farms in order to mobilize manpower for heavy, but underpaid, work.³⁶ According to the local idioms and practices, experience as the main quality of professional knowledge and practice is acquired and transferred mainly through inheritance patterns and partly through religious and seasonal ceremonies. The experience is, thus, sanctified, giving farmers powerful status in their kinship, descent, patron-client and other networks.

Personal networks, including patrilineal kinsmen, are the main sources through which the agricultural masters acquire their knowledge and experience. The members of certain patrilineal, peer and patron-client networks have the chance to engage in direct and intensive training and to gain experience in important economic professions and political positions. Also these networks preserve and transfer extensive agricultural knowledge and certain professions (e.g., agronomy, veterinary medicine, land registration and bureaucratic positions) introduced during and since the Soviet period. In the local idiom, this practice is recognized as “backing” (*pusht*), which legitimizes the privileged access of the heirs. Certain masters, who have no inheritance status or personal relations, cannot develop a good reputation regardless of their professional training.

Usto Nazar and his patrilineal kinsmen (junior brothers, sons, nephews and cousins) are among the most successful construction *brigada*, carpenters, bee-keepers, lemon-growers and potato growers in Sayyod village. *Usto* Nazar learned the professions from his grandfather, peers and colleagues and then transferred them mainly to his family members (see Figure 1). Similarly, *Usto* Shams is a local master of seeds, seedlings and construction, who has inherited his skills from his father while at the same time transferring them to his sons. The other four construction *brigadas*, and many single-workers, use construction work only as an additional source of income. They mainly work for their co-villagers and only rarely find customers in the town of Shahritus. In contrast to the superior status of the *Usto*, a title that designates prestigious and profitable professions, others types of workers are categorized as “black workers” (*maidikor*) or “unprofessional workers” (*raznarabochii*). Few people trust the single workers and therefore are unlikely to hire them and pay them decent salaries.

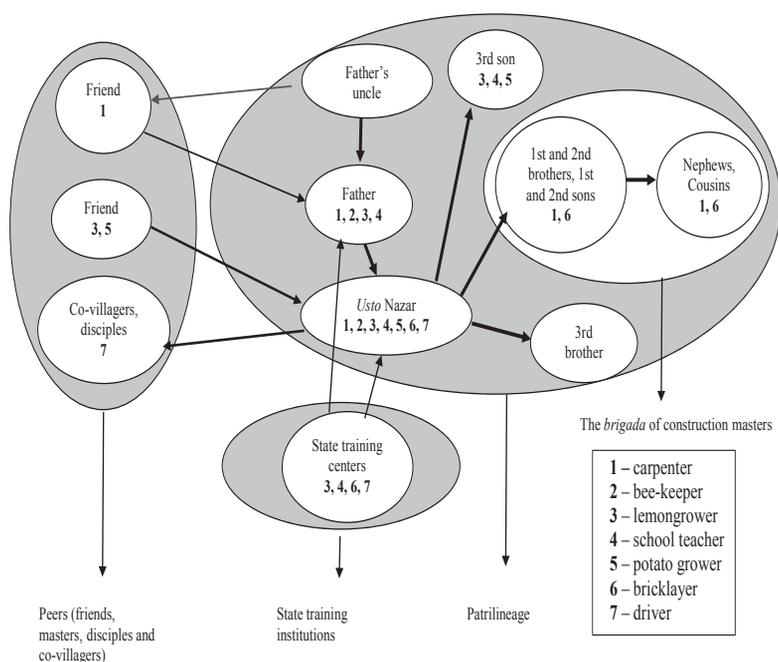
Religious ceremonies serve to allow and sanctify the inheritance status and the practices of experience and backing, helping in part, to ensure that the masters have access to strategic resources and professions, like land, water, garden, shrine, mosque and religious practices. In recent years patrilineal members increasingly practice the ceremony of *khatm*,³⁷

³⁶ Hafiz Boboyorov. 2011. *Kinship and Islam: The Role of Collective Identities in Shaping the Institutional Order of Patronage in Southern Tajikistan*. PhD Thesis. University of Bonn.

³⁷ *Khatm* literally means “to finish reading” the Koran as a sacred practice; but in this con-

during which religious notables, elders and other respected men acknowledge and celebrate inherited professions. Similarly, we also have observed an increase in the creation and reinvention of the *Shajaranoma* (genealogical book), which describes the legitimate line of inheritance of strategic properties and skills by patrilineal groups.³⁸

Figure 1. The Networks of Professional Inheritance and Knowledge Exchange of *Usto* Nazar



Beyond personal networks the masters in Sayyod village share only limited types of agricultural knowledge, mainly about the subsistence economy. In cotton-growing communities, the recipients of such knowledge are loyal workers of cotton farms. The religious and seasonal ceremonies serve as settings for sharing the masters' experience and to express the workers' indebtedness. The loyal workers gather in such ceremonies and, therefore, have access to the masters' agricultural knowledge and experience.

Besides limiting agricultural knowledge to the loyal cotton workers, the masters also use these settings to devote their knowledge and personal

text the term means to celebrate a sacred practice, claim or right and hereby to seek public acknowledgement.

³⁸ Boboyorov. 2011.

ties to impeding the transfer of professional and legal knowledge to ordinary people. Through these ceremonies, the masters stigmatize the disloyal people for their “improper” search for legal rules to achieve their claims without relying on proper personal relations. Here the main concern is to ensure the stability of the existing political and economic relations, which favor the cotton economy. The masters and other mediators ensure that the cotton farms and *brigadas* employ kinsmen, neighbors and descent groups in order to supply enough manpower. Thus, many smallholders are informed that well-connected notables and elders have prevented them from establishing and running family farms.

Likewise, the ceremonies are effective settings to stigmatize “strangers,” i.e., those who protest against inequality and the hierarchy created by the cotton economy. “Strangers” refer to a variety of the frequently reinvented discourses about people who are not loyal to *qawm* (kinship, descent or ethnic) networks and the related cotton farms. Notably, the reference to *qawm* imagines bonds among both related and unrelated workers and thereby shapes their solidarity and mobilizes them for cotton-growing activities. Such references reinvent shared kinship, descent, ethnic or religious history for often mixed and even unrelated *qawm* co-members. In fact, the cotton workers are not always related by *qawm* connections, while kinship ties are not limited to distinctive *qawms*.³⁹

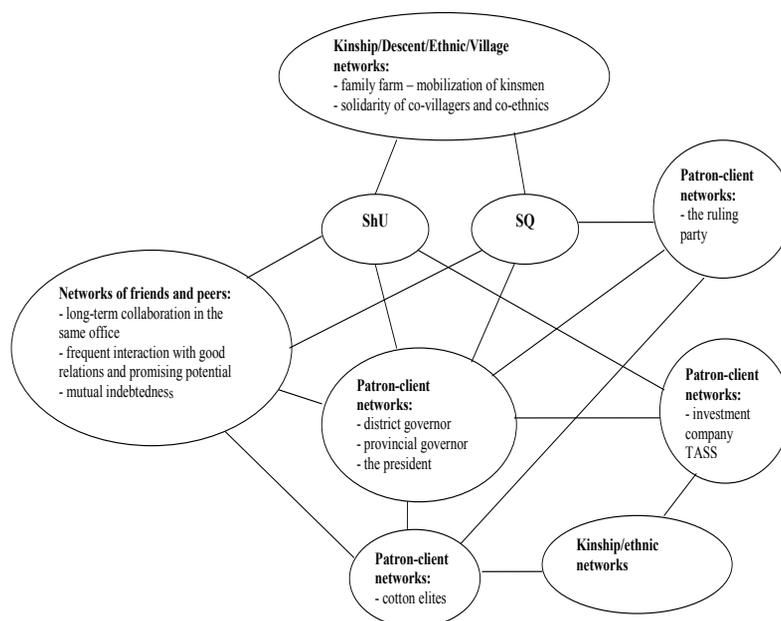
In such a context the stability of the contested political and economic relations is the main concern of the cotton elites and their cliental farmers, that is, agricultural masters, elders and religious notables. The political and economic stability of Sayyod village’s cotton-growing farms depends mainly upon two experienced masters—SQ and ShU. Since the days of the Soviet Union, they have been involved in the patron-client networks of the key players of the local cotton economy, including networks with central, provincial and district state representatives. They have regularly received material and symbolic gifts, including the highly respected Lenin medal during the Communist era, which specifically mentions their loyalty to the cotton elites. They have gained their cliental status in return for their ability to mobilize cotton workers through their patrilineal, descent and ethnic networks. In return, the highly valued cliental status of the masters, which they regard as their own family and *qawm* honor, shapes a strong affective commitment among the cotton workers.

The mediators of the cotton elites, namely the former managers of the Lomonosov Soviet kolkhoz, are aware that the masters are able to mobilize the cotton workers by highlighting their group honor and identity. These mediators include a winner of the Hero of Socialist Labor prize, one of the most honored titles of the Soviet era, and his kinsmen, who enjoy

³⁹ Boboyorov. 2011.

personal ties with the state elites of the cotton sector, including Tajikistan's current president. Due to his life-long leadership of the Soviet-era kolkhoz, the Cotton Hero and his family have developed kinship and patron-client ties with the local masters, including the two most important, SQ and ShU. These relations include frequent interactions, trust and indebtedness, among other features (see Figure 2).

Figure 2. Personal Networks of Two Key Masters in Sayyod Village



Since the president appoints district governors for only short-term periods and the cotton sector investment companies do not function at the district level, the Cotton Hero and his family play an important role by mediating between them and the local masters. Such mediation is important because it continuously involves SQ and ShU in the patron-client network of the cotton elites, which includes the district and provincial governors, the managers of the investment (“futures”) company TASS⁴⁰ and the president. These cotton elites reward their client farmers with material and symbolic means, such as land, tax exemptions, debt freezing and luxury

⁴⁰ TASS, the investment or “futures” company in the western districts of Khatlon province, including Shahritus, Qabodiyon and Nosiri Khusrav districts of Qabodiyon Oasis, own the key cotton enterprises, including cotton collection stations, cotton plants and agricultural machines stations. TASS manages cotton-related assets, including most irrigated land resources, and allocates them for the cotton sector.

gifts. In part, the inclusion of ShU in the president's and governors' lists of active women and the membership of SQ in the president's People's Democratic Party are examples of such patronage favors and gifts.

The Patron-Client Priorities for Professional Services in the Cotton Sector

The investment company TASS in the Qurghonteppa region of Khatlon province monopolizes the local and international markets of raw cotton produced in the Qabodiyon Oasis. The managers of the company have personal (kinship and patron-client) relations to central and local state elites.⁴¹ The central state elites keep close ties with their "trusted representatives," including local state officials, the managers of cotton investment companies and religious saints (*eshons*, i.e., regional leaders of Sufi orders). In return, the trusted representatives mediate to protect the political and economic interests of the elites.⁴² Thus, the state elites and the managers of TASS guarantee the privileged (re-)distribution of agricultural resources and knowledge to those farmers who are loyal to the cotton economy. A University of London report defines such exercises as "arbitrary re-distribution" in which the elites favor the privileged access of their families, friends and those who offer bribes.⁴³

In the Shahritus District, the cotton elites, including the managers of the investment company TASS and their official mediators in the local government, require the agricultural experts (agronomists and bureaucrats) to serve their cliental farmers. The farmers need to display their loyalty to the cotton economy in order to expedite bureaucratic, legal and taxation procedures required by state offices. The professional consultations, which are mainly provided at the beginning of the sowing season, provide farmers technical information about growing cotton. On other occasions, again in return for loyalty to the cotton economy, the agricultural experts consult farmers and gardeners about their new seeds, crops and gardens.⁴⁴ The farmers and *brigadirs*, including female leaders of the female laborers, are rewarded with land plots or gardens in return for their loyalty to organize and run cotton farms and teams of cotton growers. Again the farmers and *brigadirs*, who lack the necessary technical knowledge, need the professional services of their kinsmen and peers to use the properties

⁴¹ International Crisis Group. 2005. "The Curse of Cotton: Central Asia's Destructive Monoculture," 5; SOAS. 2010. *What Has Changed? Progress in eliminating the use of forced child labour in the cotton harvests of Uzbekistan and Tajikistan*: 5.

⁴² Boboyorov. 2011.

⁴³ SOAS, 24.

⁴⁴ Qamar-*brigadir*. 2012. Interviewed by Hafiz Boboyorov. Shahritus District. February 13; Usto Shams. 2012. Interviewed by Hafiz Boboyorov. Shahritus District. February 11.

they have been given.⁴⁵

TASS negatively affects the professionalization of the agricultural sector by monopolizing the provision of seeds, agricultural machines, fuel and fertilizers, as well as by supervising credits and banks. The TASS managers also make decisions about types of seeds, crops, agricultural machines, quotas for cotton, amounts of fertilizers to be used and prices for inputs and outputs.⁴⁶ The agricultural specialists of the district agricultural department mainly provide consultations for the cliental cotton-growing farmers of TASS. Among them, for example, the chief district agronomist supervises and monitors TASS extension services, especially the provision of seeds, fertilizers, fuel and agricultural machines. During the sowing season, he checks the monopolized distribution of cotton seeds by the TASS-run cotton plant. Being the exclusive distributor of cotton seeds, TASS restricts the development and extension of professional knowledge about new types of seeds.⁴⁷ The Tajik government does acknowledge that the monopoly of seed distribution is the main factor which “leads to a mixing of seed varieties and qualities, resulting in uneven staple lengths”⁴⁸ and ultimately poor agricultural performance.

TASS does not allow the individual farms to find other sources of seeds, agricultural machines and fertilizers. Without personal networks with this monopoly supplier, farmers cannot even sell their raw cotton to the cotton plant. TASS fixes the amount and price of seeds, fertilizer and fuel, and provides nonstandard agricultural machines which significantly reduce the productivity of crops. According to veteran farmers, one hectare of cotton field needs 500-600 kilograms of fertilizer in order to produce a decent harvest. However, TASS only provides expensive and limited quantities of fertilizer—200-250 kilograms per hectare.⁴⁹

Additionally, only a few farmers own the Altay sowing tractor, the 75 model, which ploughs deeper than other tractors. The Sayyod collective farm, one of the largest in the region,⁵⁰ which consists of 128 hectares

⁴⁵ Muhiba Alieva. 2012. Interviewed by Hafiz Boboyorov. Shahritus District, February 15.

⁴⁶ SOAS 29; International Crisis Group.

⁴⁷ Qamar-brigadir. 2012. Interviewed by Hafiz Boboyorov. Shahritus District. February 13; Haydar Ghulomov. 2012. Interviewed by Hafiz Boboyorov. Shahritus District. February 12; SQ. 2012. Interviewed by Hafiz Boboyorov. Shahritus District. February 13.

⁴⁸ Government of Tajikistan. 2007. *The Cotton Sector of Tajikistan. New Opportunities for the International Cotton Trade*, 8.

⁴⁹ ShU. 2012. Interviewed by Hafiz Boboyorov. Shahritus District. February 14; Qamar-brigadir. 2012. Interviewed by Hafiz Boboyorov. Shahritus District, February 13.

⁵⁰ The Collective Farm of Sayyod village was established in the aftermath of the abolition of the Collective Farm of Sayyod *Jamoat* in 2009. Currently the collective farm is subject to the *Jamoat* of Sayyod and employs 126 stakeholders from Sayyod village. It has 60 hectares of cotton fields, 46 hectares of grain fields, 19 hectares of new gardens and 3 hectares of old garden. The farm has 13 family-based *brigadas* under the authority of SQ, its head. (SQ (Head of the Collective Farm). 2012. Interviewed by Hafiz Boboyorov. Shahritus District.

of cotton and grain fields as well as gardens, has only one Altay seed-sowing tractor and one fertilizer tractor. The TASS-supervised Agricultural Machine and Tractor Station provides most other farms with only 28 and 40 model tractors. While the Altay 75 ploughs at depths of 50 cm in the soil, the nonstandard and low-power models can reach depths of only 25-30 cm. This is one of the main reasons for the low harvest of cotton. TASS also sets high prices for fuel, which again forces the farmers to use the nonstandard and low-power model tractors.

TASS monopolizes other types of agricultural machines and distributes them in return for the personal loyalty of farmers. The village-level Sayyod Collective Farm was established in the aftermath of the division of the *Jamoat*-level collective farm in 2009. The leaders of the family teams (*brigadirs*) wanted to run private farms, but without tractors, they could not sow their fields until March, which is the end of the sowing season. For this reason, the head of the collective farm, who is an honored leader since Soviet times, and the female *brigadir*, a cotton activist member of the presidential party, ShU, went to the district governor. The governor personally asked for help from the TASS manager, who the next day sent ten tractors, which sowed the collective farm's cotton fields within two days. This visit, which expressed the personal loyalty of the masters of the cotton economy to the elites, was decisive in renewing the informal commitment between the collective farm and TASS.

TASS limits the availability of new seeds to the farms it serves. The Sayyod collective farm does not benefit from the expert services and privileged taxation legally assigned for the seed-growing farms. To supply high-quality seeds to the district cotton farms, TASS, the cotton plant and individual farms must pay for the infrastructure of seed production. However, TASS assigns the Sayyod farm the role of a cotton production unit, while transferring its seed production function to the cotton-cleaning plant and thereby preventing it from engaging in other stages of seed production, including laboratory and field experimentation to develop alternative options.

Only rarely do professional seed production enterprises have the opportunity to provide their services and these cases only occur thanks to their privileged position in the patron-client network which dominates various levels of the state institutions. The Avesto seed-growing farm, which is based in Qabodiyon District, for instance, sustains its profitable economic activities due to the personal relationship of its leader to the Tajik president and TASS managers. It is a private farm specialized in cotton-growing, cotton seed production, and fisheries. The farm hires agricultural specialists from Tajikistan's Academy of Agriculture.

February 13; Qamar-*brigadir* (Chief Agronomist of the Collective Farm). 2012. Interviewed by Hafiz Boboyorov. Shahritus District. February 13.

Nevertheless, its recently introduced type of cotton seed, called Avesto-96, has found limited markets despite the fact that, as the chief agronomist of the Sayyod collective farm asserts, this new seed provides 3.8-4 tons of cotton per hectare. 100 kilograms of raw cotton provides 38-40 percent fiber. By comparison the old cotton seeds provided just 33 percent fiber.⁵¹

To increase agricultural productivity in the face of diminishing extension services and increasing risks due to climate change, local masters and state experts see the solution in an abundance of manpower, land resources, seeds, fertilizers and fuel. Hence, they sow excessive cotton seeds—60-80 kilograms of seeds per hectare instead of the standard 25-50 kilograms—in order to insure against the low-quality seeds, soil salinity and climatic uncertainty. The managers of the cotton sector are concerned with controlling the quantity of fertilizers, water and seeds as well as with their application techniques and periods. Monitoring the ability of the *brigadirs* and female mediators to mobilize ordinary workers is another important task of these specialists.⁵² An experienced and heroic farmer affirmed this point, stating that “cotton benefits from the presence of its lord and workers. Female workers must be in the field. Regardless if there are weeds to pick or not, if there is need for field work or not, their presence stimulates the growth of cotton stalk and yield.”⁵³ According to such a dominant mindset, “honest work” therefore means hard, intensive and time-consuming engagement and hence physical presence in the cotton fields, especially by women. The physical presence limits the workers’ opportunities for other economic activities and thus ensures their long-term loyalty to the farmers.

Despite the legal status of the *dehqan* farms⁵⁴ as independent shareholder (*sahmdori*) enterprises, TASS utilizes a variety of informal, particularly patron-client, means to subjugate them: its monopoly of the cotton economy, the debt system, and bureaucratic procedures. As discussed above, the monopoly on seeds, crops, land resources, irrigation infrastructure and the raw cotton markets is an important tool in this regard. The debt system ensures that the cotton farmers remain indebted to their “investors,” while the latter have privileged access to state and international financial reserves.⁵⁵ The crop monopoly means that individual farms cannot pay off their accumulated debt. As the accountant of the Sayyod collective farm explained, “Sayyod’s debt from 2009 until today constitutes 126 thousand Somoni.⁵⁶ It is only the debt for land resources. TASS is

⁵¹ Qamar-*brigadir*. 2012. Interviewed by Hafiz Boboyorov. Shahritus District. February 13.

⁵² Ibid.

⁵³ ShU. 2012. Interviewed by Hafiz Boboyorov. Shahritus District. February 14.

⁵⁴ “*Dehqan*” is Tajik word meaning “peasant”; here it refers to “agricultural”.

⁵⁵ SOAS. 25.

⁵⁶ TJ Somoni is the national currency of Tajikistan. Currently 1 TJ Somoni is equal to 0.21

interested in keeping the debt so that we are not released from it. The state froze our pre-2009 debt, which we must repay only when our farm starts making a profit from economic activities.”⁵⁷ The frozen debt of the cotton farms throughout the country was US\$553 million at the end of 2008.⁵⁸

The Cotton Sector Recovery Project of the Tajik government and the World Bank admits that in recent years the debt situation in the cotton sector has led to the perception and practice that “debts would be directly attached to land parcels and that, therefore, farmers in accepting land parcels would also be accepting personal responsibility for previous debts.”⁵⁹ As a result, the World Bank-initiated project, which was adopted in early 2007 by the government, seeks debt resolution by “delinking” the farmers from the investment companies and integrating them into the free market.⁶⁰

The other effective means to subjugate the farmers, and thus to favor personal relations, are the bureaucratic procedures of statistical reporting, accounting and tax payment. Such state and bank procedures are performed through the patron-client relations farmers have with the cotton elites. When they do not have direct patron-client ties, farmers use their kinsmen and peers to contact and negotiate with the cotton elites. Despite the increased transaction costs, the farmers prefer to show their loyalty by their personal involvement in the procedures. As many farmers pointed out, infrequent personal interaction is undesirable since such behavior causes distrust among the patrons.

Personal relations also affect the accounting and taxation practices of farmers. According to state regulations, *dehqan* farms should pay a unified tax directly in the nearest state bank office.⁶¹ Ideally this regulation should reduce transaction costs and develop impersonal relations. In fact, neither farmers nor the state officials are interested in obeying this newly-introduced regulation, but rather they modify it through their networks. Hence, personal, especially patron-client, relations are more important to fix taxes and to arrange the bureaucratic procedures of tax payment. “There is a unified tax per hectare for the *dehqan* farm. You pay it to the Tax Department through the bank. But the tax collectors come each quarter and demand a new receipt. Since the bank’s receipt is valid only for three months, you have to find or bribe somebody in order to get it every time.”⁶²

US Dollar.

⁵⁷ Qamar-*brigadir*. 2012. Interviewed by Hafiz Boboyorov. Shahritus District. February 13.

⁵⁸ SOAS. 25.

⁵⁹ Government of Tajikistan. 2007. *The Cotton Sector of Tajikistan*, 11.

⁶⁰ *Ibid.*, 18.

⁶¹ Government of Tajikistan. 2011. *Barnomai islohoti kishovarzii Jumhurii Tojikiston. Hujjati jam’basti*, 31-2.

⁶² Normat Shoev. 2012. Interviewed by Hafiz Boboyorov. Shahritus District. February 12.

For this purpose, often the farmers use their personal relations with TASS managers and other elites to access the bank services.

Adaptation of the Agricultural Extension Services into Local Networks

Today the general condition of agricultural activities, especially the professional maintenance of economic structures, knowledge and technical services, continue to worsen. Since Tajikistan's independence in 1991, the centralized professional services for the maintenance and improvement of soil, seeds and other agricultural technologies have been substantially restricted. The sub-district state organization *jamoat*, which replaced the *kolkhoz*, employs only bureaucrats, including public representatives, police officers, tax collectors and land-surveyors. The professional agriculture experts, such as agronomists and veterinarians, are mainly employed by private farms and local and international NGOs, rather than district agricultural departments.

Since the mid-1990s international donor organizations have implemented aid and development programs in different regions of Tajikistan, including the south-western districts of Qabodiyon. Donor organizations have also gradually changed their priorities from humanitarian aid to community-driven development and agricultural extension services. Currently many local NGOs represent and implement the agricultural extension service programs of international state and non-state donor organizations. The active organizations in Qabodiyon Oasis are UNDP Shahritus Area Office, Mercy Corps, GIZ, World Bank and others, which provide agricultural extension services through local NGOs.

According to local NGO representatives and experts, such agricultural extension services have primarily been dedicated to poverty reduction by focusing their support on the poor segments of the population. "We do not work with the cotton farms because cotton does not give anything to the people. We work for food security," an agricultural expert of Mercy Corps said.⁶³ However, the extension services of the local NGOs have rarely reached the poor. This is first of all due to the limited material and financial capacities of the poor families who therefore do not meet the criteria for participating in the relevant programs. Often the extension services are provided in the form of microcredits, which must be paid back at the end of each financial year. While being unable to meet this requirement, the poor families prefer to use the limited services of their kinsmen, friends and patrons. As some implemented programs for the poor families have also faced difficulties due to their low economic capacities, the experts relate the failure to the "main characteristic" of the poor, which they see as

⁶³ Ibid.

“laziness.” According to one of the local experts of NGO Shifo extension service, “I have found out that poverty is due to laziness: our organization supplies seeds and fertilizers on credit without charging interest. But we get back the credit only with great difficulty.”⁶⁴

The other crucial factor that has not been taken into consideration for the “lazy” poor is their limited agricultural capacities related to land resources, bureaucratic services and state economic policy. The extension services of the development organizations, however, serve the powerful farmers who dominate the system. The services range from the provision of new seeds, techniques and experiments to the distribution of expert advice through trainings and information media. Many international NGO local branches and local NGOs, such as Mercy Corps, Shifo, Arbitrazh, Chashma, Bonuvoni Fardo and the Subhi Sayyod Association of *Dehqan* Farms, offer their services exclusively to cotton farms.

The dominant networks of the local population impact on the way extension services are received and utilized. Gradually the networks of kinsmen, peers and patron-clients shape the beneficiaries of the extension service programs. This outcome is first of all due to the involvement of TASS, which pressures the experts of local state agencies and NGOs to serve its clients, i.e. the loyal cotton farmers. For the same reason, the district government agricultural department mediates among TASS clients and the extension programs.⁶⁵ Since the extension programs failed to serve the poor, now most of the local NGOs, including the GIZ-funded Shifo and the World Bank-funded Chashma, provide microcredits in the forms of seeds of different crops (grain, potato, onion, etc.) and high-quality fertilizers. These microcredit programs also hire agricultural specialists who share expert knowledge about the properties of the new seeds.

The setting and the audience for sharing expert knowledge are also important factors that limit the wider distribution of extension services. Extension trainings are mainly accessible to farmers due to the fact that they are the stakeholders of the extension service programs.⁶⁶ Because the patron-client relationship to the cotton elites plays a key role in the selection of farmers who receive extension services, therefore, it follows that extension services favor the loyal clients of the cotton industry.

Consequently, the distribution of expert knowledge about new seeds, for example, serves as a cliental favor for the farmers and as a power resource in the hands of the cotton elites. Obviously such knowledge-based power relations, which especially sustain the monopoly of the elites over the cotton economy, inevitably reduce the access of the majority to expert knowledge. Farm leadership becomes a necessary condition for access to

⁶⁴ Haydar Ghulomov. 2012. Interviewed by Hafiz Boboyorov. Shahritus District. February 12.

⁶⁵ Ibid.

⁶⁶ Ibid.

the settings, such as trainings and field visits by experts, in which expert knowledge is shared. The experts often visit non-household fields, which in most cases are owned by the client farmers of the cotton elites. The smallholders either have their land plots attached to their house yards (so-called *tamarqa*) or use their stakeholder (*sahmdori*) land plots on the basis of tenancy relations with the farmers. Hence, the experts cannot reach the ordinary people who have no actual (management) right to the land they visit.

This means that the smallholders and tenants are not aware of the properties of new seeds and thus, if they use them, need to consult with their farmers. The advice is provided in return for their loyalty to the tenancy and cotton monoculture system upon the land for which formally they have full (*sahmdori*) rights. The agricultural consultation is thus provided “on-site,” which means between landlord (cotton farmer) and tenant (cotton worker) as a part of their kinship, neighborhood, ethnic and other personal relations. The consultation is again limited to kinsmen, neighbors and sometimes to the members of descent groups, mobilized by cotton farmers for work in their cotton fields.

If and when ordinary farmers take the risk to sow new seeds with insufficient knowledge, there is a great chance they will harvest a reduced yield. The risk is high since imported seeds require special techniques of cultivation and irrigation to adapt to new conditions.⁶⁷ Ultimately, ignorant farmers produce a low harvest or even no profit from the new seeds. While well-trained farmers benefit from an improved harvest from using the new seeds, others often have sad stories to tell due to their misapplication. Many ordinary farmers mentioned unsuccessful experiences with new seeds for grain and watermelon. The nonprofessional names of the seeds, such as the wheat grain called “*Tanya*” (female name in Russian) and water melon called “*Amerikanka*” (literally: “American girl”), also indicate that ordinary peasants and smallholders have poor access to the relevant technical knowledge. Often they express general distrust towards any new seeds or believe that the new seeds can only be grown using a great amount of resources, including water and fertilizers. “We are using *Amerikanka* for the past 3-4 years, but we do not know the origin of the seed. The ripe fruit spoils within 10-12 days because it does not have a strong peel. We used to have local water melons such as *Astrakhan*, *Alatarbuz* and black water melon which weighed up to 68 kilograms and which could be kept for a long time and in cold weather.”⁶⁸

The reciprocal and patron-client access to professional knowledge reduces the farmers’ demand for market-oriented extension services. Most farmers refuse to pay for information. For example, one expert who works

⁶⁷ Kholmurod Juraev. 2012. Interviewed by Hafiz Boboyorov. Shahrutis District. February 15.

⁶⁸ *Usto* Shams. 2012. Interviewed by Hafiz Boboyorov. Shahrutis District. February 11.

for an SMS subscriber network expressed the situation as follows:

“The post-civil war humanitarian aid spoiled the people’s expectations. You visit them [to offer extension services] and they expect you to work for them free of charge. They do not imagine that information costs money. Through these services [newspaper and SMS subscriber networks] we try to accustom the farmers to pay for information. This is the only way that they start understanding the value of information. From the other side, when the donor leaves the country, the service will not disappear if it is paid for. The prices of the services have a symbolic value and only cover the cost and sometimes not even that much: the newspaper costs 1 Somoni per copy and the SMS monthly subscription costs 30 Somoni.”⁶⁹

Another important aspect of the extension services provided by the local NGOs and funded by their international donor organizations is to improve the management skills and knowledge of the private farmers. Some trainings, newspaper columns and SMS packages inform the farmers about the formal (bureaucratic and legal) aspects of establishing *dehqan* farms, accounting, internal book-keeping, and the regulations of taxation and statistical reporting.⁷⁰ Again kinship and patron-client networks replace the extension service NGOs, which want to enforce formal arrangements. Despite the increased transaction costs, the farmers prefer to use their personal relations to arrange their bureaucratic, accountancy, reporting and taxation affairs. In these cases, personal relations demonstrate the loyalty of farmers to their patrons in the different state departments. From the perspective of statutory regulations, “Now many *dehqan* farms work chaotically: they do not have any book-keeping and accounting and they do not have accountants and insurance systems.”⁷¹ Such “chaotic” regulations are due to those farmers who seek their personal relations with the experts and specialists to manage their farms. Like many family-based farms, Sayyod collective farm has no professional accountant or book-keeper. Rather, SQ, the head of the farm, seeks his kinsmen and friends to arrange reporting, accountancy and taxation documents for the fourteen family-based *brigadas*.

Similarly, such personal networks affect the efforts of the Subhi Sayyod Association of *Dehqan* Farms. Today about 50 private farmers are

⁶⁹ Haydar Ghulomov. 2012. Interviewed by Hafiz Boboyorov. Shahritus District. February 12.

⁷⁰ Ibid.

⁷¹ Ibid.

members of the association and each pays a 10 Somoni monthly membership fee. The managers of the association wanted to set up an accounting department for the member farms. "According to the plan, the farms were expected to pay 50 Somoni a month in return for the association's legal advice and support, and the arrangement of their reporting, accountancy and taxation documents. But the farmers did not agree, although they pay a higher price and spend a lot of time waiting behind the doors of state offices."⁷² While the individual farmers prefer to wait behind the door of the elites to maintain their patron-client relations, the association has gradually changed its own agenda. Today it serves the female clients of the cotton elites by providing agricultural trainings for them, publishing brochures and spreading stories in the media about their heroic performances for the cotton economy.

Conclusion

This article has shown how personal networks based on kinship, patron-client and other ties shape political and economic structures in the cotton sector. Contrary to the dominant discourse, the article's perspective has reconsidered the prevailing role of the state and other important actors in this sector. The findings have emphasized that personal networks are important in the reproduction and distribution of agricultural knowledge systems. The affiliation of different actors, including the local population, state elites and even the representatives of civil society, in the locally-available personal networks shapes their choices and decisions. People gain political capital and professional knowledge by maintaining and creating enduring ties with key actors at different levels through the networks they are affiliated to.

We have also observed that the stability of the cotton sector, which provides a miserable economic income to the majority of its laborers, depends on such local networks. Hence, the political role of the local masters (cotton farmers and mediators), rather than their agricultural knowledge, becomes more important for running cotton farms and mobilizing the required laborers. From this perspective, the bureaucratic, legal and professional knowledge and capacity of the agricultural actors depends upon their personal networks. These networks shape institutional rules and strategies for the reproduction and transfer of agricultural knowledge. The actors reduce the practices of horizontal sharing of knowledge while handling it as a power resource for maintaining their personal ties. The knowledge distribution system is based on the actors' personal situations in the existing networks. This means that the problems of knowledge governance are related to knowledge networks, rather than to powerful actors,

⁷² Ibid.

such as state representatives.

The local masters also distribute some forms of agricultural knowledge to their laborers, thus ensuring that they remain indebted to their cotton farms. These masters are not powerless or neutral actors, as some scholars suggest when talking about local or indigenous knowledge. Rather, such interrelations of power and knowledge elevate the successful masters to the level of being cliental farmers or the mediators of the cotton elites. The elites rely on local religious notables, elders and agricultural masters to use their local networks for the benefit of the political structures of the cotton economy. Often the latter represent and lead their extended families, descent groups, neighborhoods and religious circles through local state and traditional structures. This is especially necessary to shape cotton-growing farms and *brigadas* out of these local networks. Since agricultural experts cannot always represent their solidarity groups, therefore, other nonagricultural specialists, like religious notables, family seniors and *qawm* elders, also run cotton farms.