



## SMALL FAMILY FARMS COUNTRY FACTSHEET



### THE CONTEXT OF AGRICULTURE AND THE ROLE OF SMALL FAMILY FARMS

Tajikistan is a landlocked low-middle-income country located in Central Asia. Given the country's mountainous geography, the total arable land area is limited to only 5 percent. Despite this natural restriction, agriculture remains the key source of the population's income as well as for Tajikistan's economy. Agriculture accounts for 53 percent of total employment, but due to high out-migration rates of work-abled men the agricultural labour has become increasingly feminized. Yet, 68.5 percent of women are employed in the agricultural sector, compared to 41 percent of men. In addition, the agricultural sector generates about a quarter of total GDP, predominantly through the export of cotton. Tajikistan is a net importer of food, in particular wheat, making the country highly dependent on market prices.

Tajikistan belongs to the least urbanised countries in Central Asia. The population is unevenly distributed with 73 percent living in the country's rural areas involved in agricultural activities. An absolute majority of 88 percent of Tajikistan's farmers are small-scale family farms.

### KEY CHARACTERISTICS OF SMALL FAMILY FARMS<sup>1</sup>

#### General aspects

Smallholders in Tajikistan live on marginalised farmland, resulting in an average farm size of only 0.2 hectare. The head of a smallholder household in Tajikistan can take advantage of 10 years of education on average and leads households that commonly consists of 7 persons. A significant number of households is headed by women, yet, representing 16 percent of small family farms in Tajikistan. The number of livestock owned by small family farms in Tajikistan is increasing and centres around 1.5 Tropical Livestock Unit (TLU), with poultry, small cattle and horses as the most common owned livestock. However, pasture resources are exploited and feed is often unaffordable, leading to a consistent over-grazing of pastures. More than half of the small family farms in the country remain below the national poverty line.

#### Economic situation and diversification

Income generation of smallholders in Tajikistan is diverse, resulting in an average gross annual income of about USD 5 056.<sup>2</sup> Agriculture is the main occupation for Tajik smallholdings, with crop production being the primary activity (40 percent). However, on-farm income that accounts for 44 percent of income and income from non-agricultural wage labour (around 37 percent) are almost evenly balanced. A large share of Tajikistan's population lives in rural areas where agricultural work is seasonal and often the only compensated activity, wherefore around 14 percent of the income is generated from agricultural wage labour. In addition, rural men traditionally migrate in

### AT A GLANCE

- Despite a **declining poverty rate**, still **19.5 percent** of the population live below the poverty line of USD 1.9 a day (2011 PPP), causing the country to be **one of the poorest in Central Asia**.
- **Annual GDP growth is relatively stable**, centring around **6.5 percent** over the last decade.
- Tajikistan reports one of the **highest rates of undernourishment** in Central Asia, with **urban households** to be slightly **more food insecure**.
- **Strong dependence on food imports** and **high migration rates** represent major obstacles for sustainable economic development.

Source: World Bank, 2017.

<sup>1</sup> Unless indicated specifically, the data in this factsheet is taken from the LSMS survey 2007, analyzed by the SMALLS Team in FAO ESA. A detailed methodology description can be found online on the FAO Family Farming Knowledge Platform. Furthermore, the SMALLS Team would like to acknowledge the country office of Tajikistan for having provided valuable feedback.

<sup>2</sup> All monetary values in this factsheet are expressed in constant 2009 international dollar.

search of work and as a result remittances account for a large proportion of the households' income. Moreover, approximately 4 percent of a small family farms income is supplemented with public or private transfers.

On average, only 18 percent of the overall agricultural output is sold by a Tajik family farm, highlighting the subsistence-oriented nature of the countries' smallholders. However, smallholders' crop production is marginal, considering the very small farm size and the country's dependence on food imports.

### Productivity and technology

Agricultural practices like monocultures and the limited available farmland has placed Tajikistan's fertile land under immense stress. Moreover, due to the country's arid climate and the cultivation of water intensive crops such as cotton, agriculture relies heavily on irrigation. Approximately 83 percent of smallholder land in Tajikistan is irrigated, enabled through large-scale investments into the agricultural. Nevertheless, the majority of smallholder farmers does not have access to modern agricultural machinery, only 2.5 percent farms are motorized equipped. On the contrary, almost half of the Tajik smallholders are able to apply fertilizer on their field leading to high values of food production per hectare and to a remarkable productivity per working day (USD 8.3). Nevertheless, 99 percent of the produced crops serve to meet a small family farms' own needs.

The allocation of labour in Tajik smallholder households is diverse and despite being a farming household the biggest share of labour is allocated to off-farm activities (0.59 person days). Furthermore, female headed households often need to rely on farming services, wherefore a respectively large share of labour-days is hired (0.49 person-days).

### Constraints

The lack of agricultural extension services as well as limited access to financial support systems remains a problem encountered by smallholder farmers in Tajikistan. Only very few family farms, on average 2.5 percent, receive credit. Other factors, such as high outmigration rates, hence, an aging population that remains in the country as well as increasing costs of imported food create a circle of poverty. Weak infrastructure hampers the linkage between rural and urban markets and keeps many family farms geographically isolated. 90 percent of the Tajik family farms rely on local, rurality markets for purchasing agricultural inputs.

SMALL FAMILY FARMS IN TAJIKISTAN		SMALL FARMS	OTHER FARMS
Farm aspects	Average farm size (ha)	0.2	1.95
	% of smallholders on total farmers	88	12
	% female headed households	15.4	23.3
Income and poverty	Household income (const. 2009 Int.\$)	5056	7105
	% of income from crop production	40	50
	% of income from on-farm income	44	60
	% of income from agricultural wage labour	14	4
	% of income from non-agricultural wages and self-employment	37	29
	Smallholder poverty rate (national poverty line)	55	54
Labour	Family labour-days supplied on farm over a day period (person days)	0.31	0.77
	Hired labour-days supplied over a day period (person days)	0.49	0.17
	Family labour-days supplied off-farm over a day period (person days)	0.59	0.54
Production	Value of crop production (const. 2009 Int. \$)	1177	2680
	Amount of food produced (const. 2009 Int. \$)	1167	2479
	Value of food production per ha (const. 2009 Int. \$)	11036	13384
	Value of crop production per working day (const. 2009 Int. \$)	8.3	15.2
Capital and inputs	Livestock (TLU; pastoral households only)	1.5	2.4
	% of households using motorized equipment	2.5	13.1
	% of households using fertilizer	41.6	10.1
	Fertilizer per hectare (kg)	258	477
	Seed per hectare (kg)	297	756
	Irrigation (% of land)	83	59
Markets	% of households buying ag. inputs through formal channels*	93	96
	% of households buying ag. inputs in the local markets* <small>* 54 percent of households reported this information</small>	90	92
Constraints	% of agricultural production sold	18	26
	% of expenditure for inputs on value of production	10	23
	% of credit beneficiary households	2.5	8.2
	Distance of household from hospital (km)	5	6

Source: FAO. 2017. Smallholders data portrait (available at [www.fao.org/family-farming/data-sources/dataportrait/farm-size/en](http://www.fao.org/family-farming/data-sources/dataportrait/farm-size/en)).

### REFERENCES

- FAO. 2016. *National Gender Profile of Agricultural and Rural Livelihoods – Tajikistan*. Ankara.  
 FAO. 2012. *Eastern Europe and Central Asia Agroindustry Development Country Brief*. Budapest.

### SMALLHOLDER FARMERS' DATA PORTRAIT

The Smallholder Farmers' Data portrait is a comprehensive, systematic and standardized data set on the profile of smallholder farmers across the world. It can generate an image on how small family farmers in both emerging and developing countries live their lives. It is about putting in numbers, the constraints they face, and the choices they make so that policies can be informed by evidence to meet the challenge of agricultural development. Currently, the data portrait provides information for nineteen countries.

### For more information about SMALL FAMILY FARMS

Please visit: [www.fao.org/family-farming/themes/small-family-farmers](http://www.fao.org/family-farming/themes/small-family-farmers)

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