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ESTABLISHING VALUE CHAINS FOR AGRICULTURAL DEVELOPMENT; UZBEKISTAN. A CASE STUDY

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Abstract

Countries of the former Soviet Union have significant agricultural sectors which have underperformed since the collapse of the system in 1991. While Uzbekistan was designated as a cotton producing area, a crop it continues to grow, it has significant unrealised potential in the production of fruit and vegetables. The disintegration of the previous system removed the support system and infrastructure necessary for agricultural development. The current system is characterised by low levels of production, caused by a removal of choice from farmer's decision making and a lack of technical knowledge, an inadequate infrastructure, limited value adding opportunities and restricted access to capital. Motivated by a decline in oil prices and a returning migrant workforce the government has an opportunity and a need to facilitate the development of value chains and a more sustainable farming system. This could be achieved by giving farmers greater choice in enterprise selection and guaranteeing security of tenure, investment in infrastructure, training programmes, removing the regulatory burden for small businesses and providing a fit for purpose extension service.

Key Words; Value Chains; Uzbekistan; enabling environment

Value Chains and the former Soviet Union

Value Chains are central to the future of farming systems and agriculture in developing countries. Although the concept has been in existence for over 30 years (Porter 1985) it has only more recently been applied to development in countries where agriculture is the main industry. A value chain describes the full range of activities, which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use (Kaplinsky and Morris 2001)

Value Chains are thought to be the means by which millions of small holders and farmers can be lifted out of poverty (Webber and Labaste 2010). Central to the development of sustainable and viable value chains is government policy creating an environment in which farmers can produce their crops and livestock to their full potential and ensure they have access to the most profitable markets. While the concept as a development tool has been widely applied in Sub Saharan Africa and South Asia, as yet it has not been applied much in Central Asia even though the sudden ending of the centrally planned system of these former Soviet countries led to a lack of marketing infrastructure for farmers by which they could access markets and distribute their products.

An enduring image of agriculture in the former Soviet Union is the vast expanse of Steppe in Russia and Ukraine with its renowned black soil and great potential for producing wheat; the so called breadbasket of the East. However there was, and is, much more to the farming capacity of this former behemoth particularly in Central Asia, a region where many fruits and vegetables originated and for which it still has a comparative advantage. While the Soviet planned economy ordained that much of the land in the 'stan' countries should be opened up for wheat and cotton, its reputation for the production of fruit, vegetables and dairy products has remained.

Background: Agriculture in Uzbekistan

The most populated of these countries is Uzbekistan and in common with others in the area relies heavily on agriculture to provide employment in a country where just under half of the population live in rural areas. The sector contributes 17% to its Gross Domestic Product and employs 26% of the workforce (World Bank 2015) . The country

has 300 days of sun a year and although arable land makes up less than 10% of the total area at 4.4 million hectares, 4.1 million hectares of this is irrigated (World Bank 2015). This provides a great opportunity for the production of high value fruit and vegetable crops

While the Uzbek economy has seen growth in recent years in some sectors, falling commodity prices, particularly oil and cotton, are having an adverse impact while the difficulties faced by some trading partners have had a negative effect on the country. Russia has provided migrant Uzbek labour with significant job opportunities but as the Russian economy has contracted so has this employment and in the first six months of 2015 remittances sent back to Uzbekistan fell by half (Economist 2016). A 10% increase in minimum wages, pensions and social allowances together with tax cuts introduced in September 2015, is not thought to be sufficient to offset the decline in remittances and slowdown in exports (World Bank 2015).

Evaluating Agricultural Value Chains in Uzbekistan

These extraneous economic pressures, returning migrant workers, increasing urbanization and poverty in rural areas, highlight the need to improve agricultural productivity, not just at the farm level but also along the value chain where opportunities for employment need to be created. There have been some significant increases in productivity in agriculture, most notably in fruit and vegetable production as privatisation has been implemented with the resulting formation of private farms and the expansion of household plots. Between 2008 and 2012, for example fruit production increased by 46% (FAO 2014). However, the state directives for the growing of 'strategic crops' mean that 80% of the arable area is devoted to wheat and cotton (Uzbek Statistical Committee) . This means the profitable fruit and vegetable crops for which the country has a comparative advantage cannot realize its full potential, which is even greater while the EU ban on many such products into Russia, is in place. While this small-scale production has been productive, there is a clear lack of knowledge and understanding of new crop and husbandry techniques amongst farmers. Furthermore the use of fertilisers and pesticides is a threat to both human health and the environment while irrigation practices are unsustainable.

It is clear that the future success of the country's agriculture is pivotal to economic development, as is the Government's role in developing policy that encourages and

supports agriculture and value chains. This has begun with a reduction in the quota requirement for the strategic crops.

This paper is based on observations made over a two year period involving field visits to farms and rural businesses in the Jizzakh and Samarkand areas to assess the value chains of milk and fruit and vegetables. The purpose is to propose policy measures, which could have a role in developing an inclusive and sustainable farming.

While the potential and importance of the development of agriculture is large, as has been acknowledged in Government policy through the Presidential Decree ‘Concept of the Farms’ (2003) and ‘Law about the Farm’ (2004) it was clear from the visits and discussions with private farmers in particular that there are obstacles to the development of profitable farm enterprises and effective value chains.

Although Uzbekistan gained independence in 1991, the economy including agriculture is still in transition. The state owns all the land, even though the former state farms have been privatised into holdings of typically between 50 and 400 hectares. The dekhkans who are smallholders have up to two hectares of land while a small number of former state farms have been amalgamated into cooperatives known as shirkats. (Martius, C et al eds. 2012) While Government policy and support is directed at the dekhkans, it could be argued that it is the private farmers who should be targeted as they have the resources and opportunities to increase production and contribute more to the development of sustainable value chains

The farmers and dekhkans have the right to lease the land for 49 years but this can be revoked at any time particularly if the quotas for wheat and cotton are not met. This lack of security does not encourage long-term investment in the land and makes applying for credit difficult without being able to offer collateral for any loan. Discussions with a farmer revealed that he would have liked to have taken on more land or have more freedom in his cropping. At present he grows 15 hectares of onions, which are exported to Russia via an intermediary, on the remainder of his 300 hectares he grows wheat and cotton as required. If the requirement were removed he would continue to grow both crops but would reduce the area to concentrate on the higher value vegetables. He was interested in building a store for his crops if he could get a loan. He has eight dekhkan workers and cooperates with the dekhkan farms by supplying them with seed in return for some of their production.

The embryonic development of value chains in fruit and vegetables was evident in the Samarkand region. A private farmer producing tomatoes for local markets was interviewed he also grew peppers and cauliflowers for the Russian market via an intermediary in Samarkand City and tobacco for British American Tobacco. The access to water, a favourable climate and productive soil means that the potential for this farmer is huge but the lack of post harvest facilities and poor infrastructure; particularly roads mean that there are high levels of wastage on this holding. On a visit to this farm tomatoes picked in the morning were left out in the full sun in temperatures of over 30° C with no guarantee that they would be collected before the following day.

While there are many examples of high levels of technical knowledge and understanding in the production of agricultural products much of this is not transferred to the farmers thereby resulting in low quality and poor yields. An example of this was found in a cattle herd. This was a newly established farm of 300 hectares with a 110 head of sucker cows. However, the herd had both entire males and heifers running together with resulting in early impregnation of young stock leading to restricted development, indiscriminate breeding leading to poor quality calves and no pattern of production.

Dairy value chains appear successful but are limited by supply issues. In Forish a fully integrated 'cow to consumer' family business was supplying kefir, smetana, ice-cream and yoghurt from their farm to their own processing plant from where the products were sold in their shop to consumers. Milk was taken by truck twice a day to the plant, as they had no refrigeration. They had received a loan, which they had paid back in meat and dairy products. The business would like to expand its herd of 30 to satisfy the local demand for their products. A second milk processor was visited; again this was a family business with a husband and wife carrying out the processing. There were two issues with this business; a lack of continuity and consistency of supply as the milk was sourced from 30 different dehkhan farms with varying levels of output and quantity. They were able to sell all of their products and had the capacity to produce and sell more, but without a better more reliable supply this was not possible.

For value chains to develop a well-trained work force with business skills including entrepreneurship are essential. There is a well-documented skills gap in the country (IBRD/World Bank 2015) and this is particularly true in agriculture. A visit to a poultry farm revealed that of the 60 workers employed none had any qualification in this area.

Much of the work is of low quality and young people and women are unrepresented in the workplace (IBRD/World Bank 2015) The labour is supply driven and the lack of reliable information means that there is poor job placement and a lack of feedback to the education and training sector of what is required. Also of significance is the fact that although until now job creation has kept pace with population growth, much of this has been in the informal sector with low levels of wages and no security of employment (IBRD/World Bank 2015)

Although Uzbekistan has been working on the reform of its educational system since 1998 and the Technical Vocational Education and Training (TVET) institutional framework is in place, progress has been slow. Historically, industry was close to the TVET system as most of it was state owned and highly regulated. This is no longer the case and although employers are still consulted on policymaking, in practice this applies only to larger employers in industrial settings rather than smaller, private businesses. In agriculture, especially in rural areas and other rural businesses, the majority of enterprises are very small. Their involvement with education is very limited and the existence of high quality working practices such as professional development or human resource management is very low.

For farms and other value chain businesses to develop easily there has to be an enabling environment, which minimises the bureaucratic burden while facilitating economic activity. The number of registered businesses has doubled since 2000 and employs 56% of the workforce. However the legal and regulatory requirement remains high, particularly with the various licenses, permissions and certificates required, not just to establish a business but also to keep it operational. The World Bank/IFC 'Ease of Doing Business Survey' (World Bank 2016) found that the business enabling environment is improving as Uzbekistan is currently 87th out of 190 but still disappointing in some key areas for value chain development; particularly trading across borders and getting credit. The current system inhibits value chain development by levying a value added tax at each stage from producer to consumer.

For international value chains to develop and to take advantage of market opportunities in Russia and Kazakhstan farmers and other value chain actors will need to keep aware of technical developments in production techniques and post harvest storage processing and transport issues. In common with many former Soviet countries Uzbekistan has a

wealth of institutions and universities involved with research and international co-operation. There was little evidence of any knowledge transfer however. Agricultural advisers were unable to give levels of fertiliser use on crops and no comment was made concerning the issues on the sucker cowherd.

Policy Needs for Value Chain Development

The need is to support the existing initiatives and to further facilitate the development of business in rural areas, centred on agriculture and downstream activities. The Uzbekistan Government recognises the economic and social necessity to support agriculture to boost exports of high value products and provide employment in rural areas. The potential for development is high in fruit and vegetables where the country has a deserved reputation. This could be extended to other agricultural products particularly meat and milk. There is therefore a need to develop opportunities beyond the farm in adding value, storage and processing along the value chain.

This need should be met through policy initiatives promoting value chain development as listed below

- Tenure. Farmers should be provided with greater security in their occupation and husbandry of their land. This would provide them with an incentive to invest time and resources in the land while giving them collateral against which they could get credit.
- Freedom to farm. Farmers should be given the opportunity to grow those crops for which there is a local and international market. Participative approaches should be undertaken with farmers to gain an understanding of their needs.
- Credit. Loans should be made available both for capital expenditure and working capital either through a state sponsored system or private banks with Government support.
- Training and skill development. Support for farmers, dehkans and other rural businesses with training, skill development and knowledge
- A reduction in the regulatory environment facilitating an enabling business environment
- Establish an agricultural extension service. The purpose of which would be to provide a knowledge transfer to farms and rural businesses by collecting,

collating and disseminating research and good practice from the Universities, Institutes and international organisations to farmers.

Conclusion

There is a strong impetus to improve production and develop value chains in Uzbekistan for economic and social reasons. This can only be achieved by developing policies moving away from state management to develop and support enterprises along the value chain to ensure the viability of both dehkhan and private farmers. Policy initiatives have to be based on introducing technical improvements at the farm level, providing farmers with the freedom to choose their cropping, creating a business environment in which enterprise can be rewarded and supporting the chains with an advisory service, thereby creating a sustainable farming system.

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