Growing 'Better Cotton'

1st Multi-Stakeholder Workshop held in Dushanbe, Tajikistan

23-24 September 2008

Report on the two-day workshop held jointly by the European Bank for Reconstruction and Development and the Better Cotton Initiative to gain a common understanding of the Tajik cotton sector and to present the BCI

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Executive summary

The European Bank for Reconstruction and Development (EBRD), in cooperation with the Better Cotton Initiative (BCI), held a successful workshop in Dushanbe, Tajikistan on 23 - 24 September 2008. The purpose of the event was threefold:

1. To gain a common understanding of cotton production in Tajikistan and the issues facing the sector.
2. To present the BCI to participants so that they could fully understand the initiative and its guiding principles and criteria.
3. To discuss how the principles and criteria might apply in the Tajik context and to understand the changes necessary at a number of levels to promote the growing of ‘Better Cotton’ in Tajikistan.

The agenda of the meeting was divided into three parts to take account of the objectives outlined above. The first section on cotton production in Tajikistan was led by a short presentation on the broad range of issues facing the cotton sector. This was followed by group discussion of those issues and an invitation to add any further issues which had been missed or to re-emphasise those issues which participants felt were of particular importance. After this, representatives from the BCI gave an overview of the initiative and its criteria and mechanisms, followed by a question and answer session. Lastly, after a short presentation on how to grow ‘Better Cotton’ in Tajikistan, participants were split into groups to discuss individual BCI principles, criteria and enabling mechanisms in the Tajik context to facilitate the development of national guidance materials for the promotion of ‘Better Cotton’.

Participants raised a broad range of issues affecting the cotton sector in Tajikistan including the lack of a supportive regulatory environment, the challenges of pulling the cotton sector out of many years of constant decline, the lack of an open free market for quality inputs such as fertilisers and crop protection products, poor access to finance, and the lack of farm management and agricultural skills.

Participants generally felt that the BCI was a good initiative which could contribute social, economic and environmental benefits within the cotton sector in Tajikistan. Clearly some areas appear to be of more perceived importance than others judging by the interest shown in certain BCI principles. The working groups for ‘access to equitable finance’, ‘crop protection’ and ‘efficient use of water and soil health’ were particularly well attended and very thorough discussions resulted. Other groups such as ‘fibre quality’ were less well attended and in other cases, e.g. ‘decent work’ and ‘natural habitats’ there were no volunteers at all. These topics will therefore be subject to further investigation and discussion as part of the on-going BCI process.

A number of actions result from this meeting including the need for further research on the topic mentioned above, the need to set up a more focused Steering Committee, and the need to develop national guidance materials on how to grow ‘Better Cotton’ in the Tajik context. Once this report has been finalised, subject to consultation with participants, and released, more detail on next steps can be agreed.

Acknowledgements

The support and assistance of the Dushanbe office of the EBRD was instrumental in the smooth running and success of the workshop and the author would like to thank, in particular, Matthieu Le Blan for acting as facilitator, Bakhtiyor Mansurov, Yulia Levakova, Ravshanak Kusein-Zade and Shahnoza Solieva.

This is the first time that the BCI has used the ‘guided implementation’ method to run a ‘Better Cotton’ programme, and the EBRD would like to thank the staff of the BCI for their support and guidance in organising the workshop and for their invaluable input during the two days.

The sincere thanks of the EBRD are extended to all the participants in the workshop whose contributions were invaluable in achieving its objectives.

About this report

This report aims to record the many and varied issues presented and discussed during the two days. It should be noted that, apart from the specific objectives of the workshop, the aim was not necessarily to reach or agree on a position on all the issues raised. Thus the comments and answers recorded reflect the opinion of the person making the comment, and do not necessarily reflect the opinion of the EBRD, the BCI or any other person or organisation participating in the workshop.

Introduction

The Better Cotton Initiative is a global multi-stakeholder initiative that recognizes the wide array of issues connected with cotton cultivation. It aims to promote measurable improvements in the key environmental and social impacts of cotton cultivation worldwide to make it more sustainable (economically, environmentally, and socially). The BCI endeavours to initiate global change in the mass market, with long-term benefits for the environment, farmers and other people dependent on cotton for their livelihood. ‘Better Cotton’ is being defined through a collaborative multi-stakeholder approach that leverages the commitment of global buyers of cotton and/or cotton products who wish to buy large and increasing amounts of ‘Better Cotton’.

The EBRD has chosen to support the promotion of the BCI to complement the Bank’s recently launched Tajik Agricultural Finance Facility (TAFF). The TAFF supports the restructuring of Tajikistan’s agricultural sector by providing revolving credit lines to Tajik financial intermediaries (banks and non-bank financial institutions) who will on-lend funds to farmers for seasonal finance. The objective is to provide alternative finance to small farmers and support the ‘freedom to farm’ concept whilst employing best farming practice, particularly with respect to environmental and labour issues.

This workshop represents the start of a process through which the EBRD, with the assistance of the BCI, hopes to promote and integrate the BCI’s production principles within Tajik cotton production, and thereby have Tajikistan recognised by the market as a reliable source of sustainable cotton. Even in the light of recent efforts to diversify farming in Tajikistan it is likely that cotton will remain the most important single crop in the country and that it will still be important for export revenue

generation. Given that Tajik cotton was once recognised as the finest in Central Asia the aim is to return both the quality and the yields while ensuring that the cotton is produced in both an environmentally and socially acceptable manner.

Objectives of the workshop

1. To ensure shared understanding of the nature of the Tajikistan cotton production sector.

2. To ensure shared understanding of Version 1.0 of the BCI global principles, criteria and enabling mechanisms.

3. To identify and agree on the management practices and implementation strategies that will inform how a farmer may grow 'Better Cotton', and contribute to the development of national guidance material for Tajikistan.

Welcome and introductions

Matthieu Le Blan, Head of the EBRD office in Dushanbe, welcomed participants to the workshop and thanked all for making the effort to come and share their views with the EBRD and the BCI. He then invited Murodali Alimardon, Deputy Prime Minister of Tajikistan, to make some opening remarks on behalf of the Government of Tajikistan.

Mr Alimardon also welcomed participants and in particular those visitors from the EBRD and BCI. He noted that cotton remains an important crop for Tajikistan and that its economic and health effects are experienced all over the country: 240,000 hectares of cotton have been allocated to cotton production in 2008. Mr Alimardon emphasised that farmers must be profitable regardless of what they produce and that farmers are indeed free to produce whatever they wish. Cotton is associated with a range of issues which need to be addressed, including controlling the pests and diseases that affect cotton and ensuring that sufficient water reaches those farmers in need. Mr Alimardon outlined some of the initiatives being taken by the Government of Tajikistan to facilitate agriculture, including the import and marketing of better fertilisers, the provision of laboratory services, and allowing farmers to pledge the Certificate of Land Use Rights for raising funds. He emphasised the need for donor assistance and for a range of financial institutions offering credit to farmers so that they can choose the best deals. He offered his support to the BCI, stating that he believed it to be a good initiative which can contribute social, economic and environmental benefits to the production of cotton in Tajikistan.

Mr Alimardon's speech was followed by a brief intervention by Kosim Kosimov, Minister for Agriculture. Mr. Kosimov spoke of how the agricultural reform process in Tajikistan was moving forward and recognised the need for farming to develop sustainably.

Mark Hughes, Principal Environmental Adviser from the EBRD, was then invited to introduce himself and outline how the rest of the day would proceed. He stressed that the workshop would be focussed on information exchange and re-emphasised the objectives.

Cotton production in Tajikistan

Abdusattor Khaidarov, of Sughd Agro Serv, provided participants with an overview of cotton production in Tajikistan. Key points included:

- While 270,000 hectares of cotton have been planted in Tajikistan in 2008, this represents a small percentage of the global total. About 25,000 tonnes of cotton will be produced in Tajikistan, while in China annual production will be around 10 million tonnes, in the US 6 million tonnes, in Brazil 4 million tonnes and in Uzbekistan 1 million tonnes.
- Cotton remains of strategic importance for Tajikistan producing about 11 per cent of the country's gross domestic product. Cotton produces fibre and oil from the seed and fodder and fuel from the foliage and stalks. About one third of the Tajik population remain below the poverty line, of which people involved in agricultural production represent a significant proportion.
- Tajikistan is a highly mountainous country and only a small proportion of its land is available for agriculture. Agricultural land per capita is the lowest in Central Asia with around 0.08 hectares of irrigated land per person.
- Cotton production has been declining since a peak in the 1980s when about 1 million tonnes were produced annually. In 2004 about 556,000 tonnes were produced and this dropped even further in 2006 with a production of 415,000 tonnes. It is hoped that the year 2008 will see a slight recovery in the yields.
- Land remains the property of the state with farmers being granted the rights to use land via certificates.
- March 2007 saw the introduction of Resolution 111 on the Freedom to Farm which commits the Tajik government to comprehensive reform of the agricultural sector, with the aim of giving renewed impetus to market-orientated agriculture.
- On-going problems include the rising price of inputs such as diesel and fertilisers, the lack of quality seeds, the poor state of the irrigation system and a shortage of manpower.
- Debt remains a problem for farmers with the total debt now standing at around USD 500 million.
- The state of equipment and techniques used by ginneries is a serious issue with much equipment being outdated.

At this point, participants divided into groups of three or four people to discuss what additional issues or problems they felt should be emphasised in relation to the state of current cotton production in Tajikistan. There was a wide ranging and comprehensive feedback from the different workgroups. For the sake of brevity this report will attempt to summarise the overall feedback. It should be noted that some statements, while grouped together, are contrary to each other. This simply reflects the divergence of opinions on some of the issues.

Enabling environment

- The issues associated with cotton production are part of a much more complex challenge linked to poverty, health, rural economy and livelihoods - the key is to find entry points to tackle the situation.
- Lack of a rational agrarian policy covering both cotton and other sectors.

- Looking at example of China and Uzbekistan there is a need for considerable support from government - need for government to provide more support to the sector.
- The problems of the cotton sector are well and often discussed. The government states that it has put in place mechanisms to resolve the debt problem and that other measures are being developed to address key issues.
- There is a need to provide support to farmers and other rural actors for implementation of Resolution 111. The resolution needs to be universally and comprehensively implemented.
- Given the very recent introduction of Resolution 111 it is proving difficult to find a market for other crops.
- The assertion that cotton is a strategic crop (if it is only 11 per cent of GDP) needs to be challenged. Given all the challenges and the lack of rewards there is no motivation to grow cotton on the part of farmers.
- However, what are the alternatives to cotton? What other crops are best to farm and in what proportions?
- Marketing is improving but further development is needed.
- Tajikistan needs to be processing more of its cotton into a final product.
- There are monopolies remaining in certain cotton areas.
- The administrative system is still characterised by a continued emphasis on personal interest rather than on the interests of the farmers.

Quality

- Quality of cotton has deteriorated over the last 10 years - staple length has decreased and price achieved is therefore lower. The grade of the cotton is still good.

Soil and water

- Difficulties with water supply and use. Need to develop irrigation system. Drill wells for groundwater.
- Soil degradation.

Inputs

- Cotton is labour intensive and needs significant manpower - migration means a loss of vital workforce and is reflective of a loss of confidence in agriculture.
- Issue of monopolies on import of inputs and export of products.
- Lack of good quality seeds. Need for development of new seed using research skills in Tajikistan.
- Difficulties accessing good fertilisers - especially phosphorous and potassium. Labelling of fertilisers is sometimes wrong (ingredients are wrong).
- No quality control on content of pesticides.
- The timely provision of fuel and lubricants.
- Lack of spare parts for machines. Lack of machinery itself. Out-of-date machinery.

Finance

- Lack of different financing mechanisms and difficulties accessing finance. Banks feel that the agricultural sector is too risky and that farmers are not knowledgeable enough.
- Problems accessing finance. The problems of farmers' debt - do not want new debt on top of old - need comprehensive rescheduling of debt.
- Soviet mindset still focussed on yield and not profitability.
- With the current prices farmers receive for cotton they do not have enough money to re-invest in more advanced techniques.
- Focus on profit.
- Lack of subsidies from the government.
- Applying for a loan is an overly complex process and as a consequence of delays some participants were unable to get a loan.
- Need to organise information on pricing. Farmers need to know forecasts on the potential prices for cotton.
- Prices for raw cotton are different in different areas of the country. Why?

Farm management

- Need to better develop biological methods for pest control.
- Lack of crop rotation.
- Education of farmers - there is a lack of management skills within dehkan[1] farms.
- Some farmers were not allowed to move their cotton out of their region to sell in different markets.

BCI global principles, criteria and enabling mechanisms

Lise Melvin (BCI Initiative Manager) and Anna Bexell (Chair of the BCI Steering Committee and Global Cotton Coordinator of IKEA) presented the BCI to participants. Their presentation included a general introduction to cotton and the range of social and environmental issues associated with cotton production worldwide, an introduction to the BCI and its partners and an explanation of the 'Better Cotton' system.

The BCI presentation triggered a number of questions. Participants generally welcomed the initiative but wanted to understand better how the initiative might work in the Tajik context and to learn from some examples of previous BCI work in other countries. Questions on the presentation included:

- How does the process of implementation work?
- How would that process work in the Tajik context in particular?
- What concrete positive examples can be shared from the BCI's work in other countries?

[1] Dehkan ("peasant") farms are the result of the Tajik government's reorganisation of the original, large sized, state owned "sovkhoz" and "kolkhoz" farms. They are private, smaller sized farms and can be organised as collective and/or individual and family dehkan farms.

- What financial assistance is available to support the implementation of the BCI? Does the BCI have a financial mechanism attached to it through which people can access loans?
- Who is driving the BCI process and who would be responsible for that in Tajikistan?

Other participants raised issues which had been mentioned in the previous session on cotton production in Tajikistan, notably concerning access to quality seeds, water supply, inputs and machinery, and wondered how the BCI would assist Tajikistan in addressing these challenges.

Ms Melvin and Ms Bexell addressed all of the various questions, stressing that the 'Better Cotton' system is a long-term approach to addressing issues in the cotton sector and, if and when started in Tajikistan, is not going to lead to overnight changes in the country. They also stressed the multi-stakeholder nature of the BCI which in other countries has involved contact with a range of NGOs, institutes, governmental bodies, farmers and other stakeholders to obtain a broad view on how the BCI process should look in each country context. The BCI does not provide finance or technical assistance directly - that aspect may be dealt with by other stakeholders involved in developing the 'Better Cotton' system in country, or involved with BCI in general.

How to grow 'Better Cotton' in Tajikistan

Hugo Weissen, an adviser to the EBRD's Tajik Agricultural Finance Facility, gave a presentation entitled "How to grow 'Better Cotton' in Tajikistan", which looked at the complexities of the Tajik cotton value chain, some details of the BCI production principles and made suggestions for how those principles could be implemented in the Tajik context.

Developing national guidance material

For the next session participants were split (according to their choice) into six workgroups corresponding to BCI production principles and enabling mechanisms:

1. Knowledge sharing and skills development
2. Efficient use of water and soil health
3. Fibre quality
4. Equitable access to responsible finance
5. Crop protection
6. Effective producer organisation.

It should be noted that for some principles and mechanisms there were either no, or very few, participants. For this reason, soil health and efficient water use were integrated into one group, and the principles to promote decent work and to conserve natural habitats were not discussed. Those topics not discussed at this first workshop will be given due attention in the next phases of research, scoping and stakeholder engagement in Tajikistan. Each workgroup was given a worksheet with a number of questions to be answered. Some worksheets also included a table to be completed. The aim of this session was to identify management practices and implementation strategies for growing 'Better Cotton' in line with BCI production principles and

enabling mechanisms. Once discussions were finished a rapporteur from each group provided feedback to the workshop. The completed worksheets can be found in Annex 1.

Workgroup feedback

1. Knowledge sharing and skills development

Currently there are a limited number of routes for knowledge sharing and skills development provided either by the government or through donor funded private organisations. Knowledge sharing and skills development is of great importance for Tajik farmers to improve their production techniques. Potential routes available for the dissemination of information include various broadcast media (radio, TV, brochures), training and demonstration, and exchange visits, but all appear to have both advantages and disadvantages. Taking radio as an example, a programme called "Village Life" has a good outreach but the timing of the broadcast is not ideal and the variability in the electricity supply means that transmission is not consistent. This could be improved by the creation of a dedicated channel, by being broadcast at a more suitable time, and/or by disseminating short, targeted, simple information, possibly through printed leaflets or brochures, which would not be dependent on an unreliable electricity supply.

2. Efficient use of water and soil health

Note: The issues of efficient use of water, soil health, and habitat conservation would normally be considered separately but given the lack of volunteers for this particular group it was decided to put water and soil health together and deal with habitat conservation through additional discussions at a later date.

All cotton in Tajikistan is irrigated but much of the infrastructure for irrigation is dilapidated. The most common irrigation method is flood irrigation with around 50 per cent of farms taking water from irrigation channels and 50 per cent from underground water wells. Those bodies which are supposed to oversee and maintain the irrigation system lack sufficient responsibility, the funds and the training to manage the irrigation system effectively, and there is a lack of transparency in the management process. Given the very mountainous geography of Tajikistan there is potentially no shortage of water but the aging dilapidated distribution network means that many cotton farmers lack the water the crop needs. Where water is available, there is a very uneven distribution. Some research has been (or is being) undertaken to assess the most effective method of irrigation in Tajikistan. For example, while some thought that drip irrigation would be effective others pointed out that such systems require pumps (meaning fuel and maintenance) and clean water to avoid blockage of pipes. In the local context fuel supplies are short and the ability to maintain such systems might not always be present. Hence there is a need to define what the best irrigation system is in the local context, taking into account local knowledge and capacity. The setting up of water use associations is seen as important so that local responsibility for maintaining water supply can be allocated.

The maintenance of quality soils able to support cotton crops is a major challenge for Tajikistan. Being so mountainous, the actual percentage of flat land available for cropping is very limited and hence the most productive lands have been overused and are now highly degraded. Poor irrigation practices and poor management practices have led to the salinisation and erosion of soils contributing to falling yields,

irrespective of which crop. There is regulation dealing with soil management and there are some donor or international financial institution (IFI) projects to manage erosion of soils and improve soil management. However, there is a need for a more comprehensive improvement in soil management practices and the introduction of a proper system of crop rotation (now possible with the 'freedom to farm' concept). Other improvements to limit soil erosion might include the planting of more trees (particularly on slopes) and the use of terracing and, to promote more fertility, the use of deep ploughing to turn up fertile soil. Farmers and extension service providers need to be trained in the use of fertilisers and fertilisers need to be made available at the right price.

3. Fibre quality

Fibre quality is of great importance when considering the price farmers will get for their cotton but there are a number of factors which impede quality improvements. Such factors include the poor quality of seeds and the mixing of seed types within the same fields. Cotton fibres are mixed both on their way to and in the gin itself and the equipment used for cotton ginning adds to further deterioration of fibre quality. At the same time there are other positive factors, such as the hand-picking of the majority of Tajik cotton, which contribute to the improvement of quality. The key therefore, is to improve the variety and quality of seeds, farming practices, the handling of cotton on the farm, when transported and in the ginnery, and the systems used for grading of cotton. By increasing staple length and ensuring that length on a consistent basis, the value of Tajik cotton will be greatly enhanced. As one of the participants in the meeting stated, Tajik cotton was formerly the highest quality cotton produced in the former Soviet Union and it should be the aim to recapture this position.

4. Equitable access to responsible finance

Clearly farmers need money, particularly working capital, to keep farms operating. It was noted during follow-up questions that farmers would not require such finance if they did not need to pay for inputs, i.e. if they continue the practice of receiving inputs from investors. Smaller farms are actually seen as less risky from a financial institutions perspective, with some studies showing a default rate of less than 1 per cent. Key providers of finance include the government, the Bank of Tajikistan, private local banks and the remittances sent home from the Tajik Diaspora. The constraints that hinder access to finance include the existing indebtedness of many farmers, getting access to banks (distance from farms to town locations), problems of registering collateral, limited resource within banks, and the bureaucracy associated with obtaining a loan. It is hoped that with the full implementation of Resolution 111, both national and local government will stop interfering in the choices made by farmers and so free them to approach banks for the financing they need. The banks are in the best position to provide the advice and finance farmers need: it is vital that farmers stop receiving funding or in-kind funding from investors. Finally, for the promotion of environmentally and socially sustainable farming, it was suggested that discounted interest rates could be offered to those farmers employing best farming practices.

5. Crop protection

There are a number of methods used in Tajikistan for the protection of the cotton crop against various pests and diseases. In terms of pesticides, the availability of such products is limited and the quality and labelling of those chemicals inconsistent. The

government currently controls the import of pesticides and growers are unable to independently verify that they are of an acceptable quality. It was also noted that some 'investors' have also provided pesticides as part of their pre-financing package. Tajikistan is a signatory to the Rotterdam Convention (on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides) and has signed and ratified the Stockholm Convention (on Persistent Organic Pollutants) although it is not clear how these conventions are reflected in national law or practice. The law does place certain requirements on pesticide users for the preparation and application of pesticides (e.g. in relation to the wearing of protective equipment and the protection of vulnerable persons like the young and pregnant women) but many farmers do not implement those requirements. There are also requirements for colour coded warning signals in fields after spraying and these are reported as working well. Pesticide containers should be stored away from the field in a dedicated storage area but it seems that these containers are, in some cases, being washed out and used for the storage of other liquids (although not foodstuffs). Other techniques such as Integrated Pest Management are possible in theory and recognised as being more beneficial, but require a certain amount of finance which most farmers do not have. Finally, there was discussion of the use of biological controls. Tajikistan has several bio-factories (both state and privately owned) which produce a variety of beneficial insects for biological pest control. This technique may offer a more cost-effective and less hazardous method for controlling pests and many participants felt that this technique should be further developed.

6. Effective producer organisation

Given the large number of smaller farms it is important to organise producer groups to help with, for example, the purchase of machinery and inputs and to market final products. Members of such groups must be people who have a good knowledge of the keys issues, e.g. farmers and other producers. Producer groups have a key role to play in disseminating information on a range of issues and to ensure that lessons are learned from previous mistakes. Such groups could come in many different forms, such as agricultural service or supply providers (e.g. water use and seed breeding associations), or agricultural marketing providers helping with the transformation, packaging or distribution of products. There is some evidence, taken from the TAFF project, that such producer organisations are emerging, notably water use associations. These associations are starting to play a broader role by seeking access to credit on behalf of farmers and seeking access to seeds. There was some discussion of the model of farmers' cooperatives and it was noted there are issues with the law related to such organisations, notably tax treatment. Draft laws have been prepared to deal with this but the government has not yet adopted any of these.

Swedish International Development Agency (Sida) seed project

Following the conclusion of the feedback from workgroups, Muhamadi Muminov from Sida gave a short presentation on the work they are doing with seeds. In 2008 Bayer provided 60 tonnes of seeds which have been planted and are currently being tested and evaluated. January 2008 saw the introduction of a new law on seeds giving more freedom to import and use different seed varieties. One of the key problems is the lack of equipped laboratories that can undertake the analysis of seeds.

Summarising the workshop

In closing the workshop, Mr Le Blan thanked participants for their time and input. Mr Hughes gave an outline of next steps for the BCI process including the formation of a national working group and the need to undertake more consultation to gain a better understanding of the issues facing Tajik cotton and the potential solutions to address those issues.

Annex 1 - Completed worksheets

To all groups:

To complete the table for the BCI principle / enabling mechanism you are considering

General questions

1. *Is there any information already published that covers the topic you are considering (for example– published Manuals on the safe use of pesticides, etc.)?*

2. *If there is any published information, please indicate which criteria it covers well, and which ones it does not cover (or does not cover very well).*

3. *Should detailed guidance material be developed, or existing material updated / be made cotton specific?*

4. *What programmes are in place / information is available to support farmers / cotton farmers to meet their responsibilities under the relevant legislation?*

1. Knowledge sharing and skills development

Criteria	Examples of programmes that use these methods in regional context	Benefits in using this method	Limitations to using this method	How useful is this technique to sharing skills and knowledge in this regional context?
Radio broadcasting	'Village life' in National Radio.	Good outreach possible.	Lack of electricity, time of broadcast (14:00-15:00) not suitable. Most farmers are in the field.	The current program is not demand driven and therefore not efficient. It would be better to create a new channel. Radio is suitable to disseminate short information, but no complex messages.
Field days	Public and private extension services conduct field days all over the country.	Sharing skills and knowledge. It is more effective to see than only to hear. Create contacts, networking.	Organizational issues, financial constraints, level of interest of farmers not high enough, women are often excluded, limited time span (season, weather).	If well organized with the appropriate participants it is very useful for information dissemination and networking.
Public extension	Agroprom, research institutes, seed breeding and multiplication farms, ecology, local land committee.	Existing network all over the country, can provide new information and consultation, are well connected to research and innovations.	In fact these organizations act rather like control organs than consultants. Low salaries contribute to low motivation and corruption. Problems with transport and finances.	Not effectively operating as extension service, but as control. They do not have enough new information. No capacity building of staff. They have limited contacts abroad and usually no internet. No stability, regular staff changes –even Ag Min. changes every year.
Private extension	ATAC, AIN, ZarZamin, Jovid plus new organizations which are established through international projects.	New training methods to enable farmers to take their own decisions; better access to finance (projects and int'l org), innovations, capacity building, contacts.	Financing depends almost exclusively on donors, very limited income from fees for services or alternative sources. Sustainability?	Help farmers to become more independent, which will have a long-term impact. But it is very time consuming because of agricultural structural changes. It will be good to expand these systems into VA systems to have better coverage and lower costs.

Criteria	Examples of programmes that use these methods in regional context	Benefits in using this method	Limitations to using this method	How useful is this technique to sharing skills and knowledge in this regional context?
Commercial extension	Extension services paid for through banks, processors and other businesses.	Usually services are specialized and profit focused. Good quality, because the profit of the enterprise depends also on these services. Sustainable as long as the business is running.	Too limited, extension officers act as agents and may influence farmers negatively, because of profit aspect. Tendency is to keep the farmer dependant rather than teaching him to take his own decisions.	Money is a good incentive, that's why this methodology has high potential in our region.
Exchange visits	Private and public organizations, national and international NGOs.	Sharing skills and knowledge. It is more effective to see than only to hear. Create contacts, networking.	Organizational issues, financial constraints, level of interest of farmers not high enough, women are often excluded, limited time span (season, weather). Not all participants are willing to share their experience.	If well organized with the appropriate participants it is very useful for information dissemination and networking.
Whole family training	n.a.			No potential, too traditional and gender disaggregated.
On–farm demonstrations	Exists within several projects in several regions, public and private actors.	What you do once, you can do always. Farmers learn by doing. Multiplication through neighbours and organized field days. A series of procedures can be shown which build on each others, i.e. tree nursery, fruit orchard, improved cultivation, processing, marketing.	Expensive and risky. Only few people might benefit from the demonstration. The farmer might not be willing to share experience if it is successful – competition. Very few farmers are open for on-farm demonstrations. Only places which are well accessible are suitable.	Useful for demonstration when well organized and well arranged. Spill over effect is still limited, but expected to increase in the future. Simple demonstrations are copied faster.

Criteria	Examples of programmes that use these methods in regional context	Benefits in using this method	Limitations to using this method	How useful is this technique to sharing skills and knowledge in this regional context?
Farmer field schools	Private and public organizations, national and international NGOs.	Practically to show in the field. It is more effective to see than only to hear. Create contacts, networking.	Expensive. Only places which are well accessible are suitable.	Usually farmer field schools are conducted by local experts or advanced farmers who have and gain respect, trust and this trust towards to facilitator contributes to effectiveness. Farmers learn to observe their own fields.
Farmer-participatory training	Private extensionists and NGO based organizations.	Develops the participants activeness, ideas and when they develop the ideas themselves usually they believe more.	Professional staff for facilitating, passive farmers because before farmers used to get just orders, no investment of time by farmers for capacity building, farmers do not realise the importance of farmer-participation tanning.	The main benefit is to change the attitude and behaviour of farmers.
Participatory varietal selection	NGO based projects, cooperatives, farmer associations, association of seeds breeders.	More quality yields.		
Other				

2. Efficient use of water and soil health

a. Water management

1. *What percentage of the current national cotton crop is irrigated,?*
    a. *All cotton is irrigated but only around 60% is optimal irrigated and 40% is suboptimal irrigated*
2. *What are the characteristics of irrigated cotton - e.g. water source (surface or ground), type of irrigation (surface, sprinkler, drip), location (which region(s))*
    a. *100% flood irrigated, half from channels, half from pumping from underground.*
    b. *Cotton is grown in Khatlon and Soghd. Similar problems in both regions regarding irrigation.*

Criteria	**Description of the tools that are available to address / meet the criteria**	**Benefits in adopting the tool**	**Limitations to adopting the tool**	**What written information already exists?** If possible, please provide details (e.g. document name / reference, information source, contacts etc. **Is it up-to-date and useable?**
Water use is optimized.	Organizations involved in water resource management (responsibilities include coordinating irrigation schedules, cleaning and maintaining channels, repairing pumps or install new ones).		Presently such organizations do not have enough responsibility, and there is a lack of transparency. There is also a lack of funds, lack of trained staff both at farm level and in those water resource management groups.	

Criteria	Description of the tools that are available to address / meet the criteria	Benefits in adopting the tool	Limitations to adopting the tool	What written information already exists? If possible, please provide details (e.g. document name / reference, information source, contacts etc. Is it up-to-date and useable?
Water extraction does not cause adverse effects on groundwater and water bodies.	Thorough control of water capacity for irrigation and to cropping area.		The overall Cotton Production plan dictates a certain cotton production. Despite the freedom of farmers to grow what they want there is still a pressure to grow cotton.	

b. Soil management

1. *Are there any regulations that govern whether land can be cropped (e.g. if greater than a certain % slope), or whether erosion must be controlled? What are the major causes of erosion (e.g. farming on land that is steep, heavy rainfall, lack of vegetative cover)*
    a. *There is a regulation dealing with this issue (group cannot remember the name of law). Regulation deals with means of controlling erosion. There is also an ADB project on soil management.*

Criteria	Description of the tools that are available to address / meet the criteria	Benefits in adopting the tool	Limitations to adopting the tool	What written information already exists? If possible, please provide details (e.g. document name / reference, information source, contacts etc. Is it up-to-date and useable?
Soil management practices are used that maintain and enhance the structure and fertility of the soil.	Introduce a proper rotation system to restore soil structure (lucerne as a rotation crop).		After privatization there are many small farms making it difficult to have a proper rotation system.	
Nutrients are applied on the basis of crop and soil needs. Timing, placement and quantity applied are all optimised.	- Training of farmers and extensionists. - Better information on issues like weather situation. - Assure the availability of inputs to an affordable price at the proper time.			
Production practices are used that minimise erosion.	- Rotation with legumes to improve soil structure. - Leave residues on the soil after picking cotton in the fall.			

3. Fibre quality

1. *Do farmers have a choice of which varieties to plant, and if yes, how do they choose which variety to plant ?*
   Yes. They have the right to choose the variety they plant. But the qualities available are not good enough. They can be from the 5th or 7th cycle of reproduction of the seed.

   Varieties are chosen according to the climate and soil quality. Among the classic varieties used in Tajikistan: Ferghana 3, Namangan 77, S 65-30, Khujand, Isfisor. For example, the Sughd region uses predominantly Ferghana 3 variety in the Zafarabadskiy raion. In the Spitamen raion, which is located at a higher altitude, the meltdown at spring time comes later. So water will come later. Namagan is a very drought resistant variety. This is why it is used over there.

   Last year the government let in Turkish seeds to be planted. 60 MT allowed in.

2. *Is there a local breeding programme that develops locally-adapted varieties? If Yes, what is the focus of the breeding programme ? (e.g. yield, quality (length), etc.) ?*

Criteria
Practices are adopted that maximize the fibre quality.
Seed cotton is harvested, managed, and stored to minimise contamination and damage.

High Volume Instrument (HVI)

HVI testing is the new norm in the world of cotton merchandising.

The problem merchants face with Tajik cotton at destination is that no consumer is willing to pay the same price as for Uzbek since the HVI results show that grade and staple are mixed, although Tajik cotton has to be bought here at roughly the same price.

HVI results are what the buyers will look at before buying your cotton to spin yarn. If you want Tajik cotton to re-establish its position on world markets, and get a better price at the farm gate, you have to be able to satisfy your buyer's requirements.

Instrument Cotton Classing is based on:
- Colour (Rd and +b)
- Micronaire
- Length

- Strength
- Maturity
- Trash content is the only element left to human subjectivity

Ginning and its effect on cotton length

Cotton is a natural fibre. The more it is processed, the more it loses in quality. Thanks to hand picking, ginning is still relatively gentle on the fibre in Tajikistan.

Fibre length implications for spinning

To produce yarn the fibres need to be opened, cleaned, blended and aligned in parallel – until a twist keeps the fibre bundled together as a yarn.

Yarn selection for the spinning mill – determining factors –
Remember that ring spinning mills make the finest yarn. This is what Tajik MS (sredni voloknistiy) used to be spun on, when it was type 4. Now that it is mixed with shorter fibre, it takes a $200 discount at destination markets since it has to go on open end machines to produce lower quality yarn for lower value textile goods.

Priority	Ring spinning	Rotor Spinning
1	Length and length **uniformity**	Micronaire, fineness
2	Strength	Strength
3	Micronaire, fineness	Length and length uniformity

Impact of fibre properties:
- Length contributes to yarn strength and performance. The longer the staple, therefore, the more twist is traversed by each fibre so long staples allow finer and stronger yarns.

And of course on the contrary:
- Short fibre negatively affects yarn strength, evenness and performance. Increases hairiness of the yarn. It will stop the mill when work is in progress, causing a loss.

Solutions:
1. Get better seeds and avoid mixing them when sowing
2. Stop mixing cotton when bringing it to the gin
3. Invest in more recent gins
4. Improve timely irrigation.

5. Crop protection

1. *What would be the impact – per pesticide – of the proposed restriction based on WHO class I, and endosulfan? (i.e. how critical are each of the pesticides included in this list? Are good alternatives available?)*
2. *What programmes and / or practices are in place that minimize the risks of applying these pesticides?*

Criteria	**Description of the tools that are available to address / meet the criteria**	**Benefits in adopting the tool**	**Limitations to adopting the tool**	**What written information already exists?** If possible, please provide details (e.g. document name / reference, information source, contacts etc. **Is it up-to-date and useable?**
An Integrated Pest Management Programme is adopted.	- Agrotechnical (Plough). - Biological (Bio laboratories, pest/ beneficial relationship). - Chemical (pesticides).	Big benefits, less expensive (chemicals are expensive), preservation of beneficials in soil, healthier.	- Only if you have sufficient finance can you adopt IPM. - Not enough trained people. - Production technology.	See general questions.

Criteria	Description of the tools that are available to address / meet the criteria	Benefits in adopting the tool	Limitations to adopting the tool	What written information already exists? If possible, please provide details (e.g. document name / reference, information source, contacts etc. Is it up-to-date and useable?
Use of the following pesticides: those categorised as WHO Class I, or are listed by the Stockholm or Rotterdam Conventions and endosulfan, is phased out over time, with the phasing out timeline based on the availability of better alternatives and ability for the risk to be properly managed.	Tajikistan is member of various conventions (e.g. the Stockholm [signed and ratified] and the Rotterdam Convention [signed only]). Extension, control over chemical import.		Pesticide labels are often fake, so growers don't know what they are buying.	
Pesticides are used on crops for which they are legally registered for use, and are correctly labelled.	Pesticide labels are often fake, so growers don't know what they are buying. Government control over imports (quality control).	Quality control, improved access to materials of known origin.	Hard to police, and hard to standardize. It is difficult to analyze the actual content of pesticide containers.	

Criteria	Description of the tools that are available to address / meet the criteria	Benefits in adopting the tool	Limitations to adopting the tool	What written information already exists? If possible, please provide details (e.g. document name / reference, information source, contacts etc. Is it up-to-date and useable?
Pesticides are prepared and applied by persons who are: healthy, skilled and trained in the application of pesticides, wearing appropriate protective and safety equipment, 18 years or older, not pregnant or nursing.	There is a law that all of these requirements should be followed, but reality is of course different. Some farmers do follow the rules.	Health benefits.	Not always implemented (or only by some).	
Storage and handling of pesticide containers avoids environmental and human exposure.	Agronomists and entomologists are in charge of this.	Someone is in charge of handling pesticides.		

Criteria	Description of the tools that are available to address / meet the criteria	Benefits in adopting the tool	Limitations to adopting the tool	What written information already exists? If possible, please provide details (e.g. document name / reference, information source, contacts etc. Is it up-to-date and useable?
Pesticides are applied in appropriate climatic conditions, according to label directions, and or manufacturers' directions, with well-maintained equipment.	There are norms about the entry periods for sprayed fields. Colour codes explain whether or not it is safe to re-enter a field (red unsafe, yellow safe).	Alerting people to dangers.	Colour coding works well.	

Annex 2 - Agenda

Agenda

1st Multi-stakeholder workshop in Tajikistan to initiate 'Better Cotton'

Workshop objectives

1. To ensure shared understanding of the nature of the Tajikistan cotton production sector.
2. To ensure shared understanding of Version 1.0 of the BCI global principles, criteria and enabling mechanisms.
3. To identify and agree on the management practices and implementation strategies that will inform how a farmer may grow 'Better Cotton', and contribute to the development of national guidance material for Tajikistan.

Tuesday 23 September

Time	Subject	Purpose / Content
09:00-09:30	**Welcome and introductions**	Formal opening and participant introductions
09:30-09:45	**Objectives and agenda**	To have a shared understanding of the purpose of this workshop and how the day will proceed.
09:45-11:00	**Cotton production in Tajikistan**	To ensure shared understanding of the nature of the Tajikistan cotton production sector
11:00-11:30	BREAK	
11:30-13:00	**BCI global principles, criteria and enabling mechanisms**	Introducing BCI and the current version of the BCI global principles, criteria and enabling mechanisms
		Discussion to ensure shared understanding of the Better Cotton Initiative
13:00-14:00	LUNCH	
14:00-14:30	**How to grow 'Better Cotton' in Tajikistan**	Presentation of initial research on existing management practices, implementation strategies, and country programmes
14:30-16:30	**Developing national guidance material**	**Group work session** To identify the management practices, and implementation strategies for growing 'Better Cotton' in line with the production principles and enabling mechanisms
16:30-17:30	**How to grow 'Better Cotton' in Tajikistan**	**Group work presentations and discussions** 1. Knowledge sharing and skills development 2. Efficient use of water 3. Decent work
17:30-17:45	**Wrap up**	To review progress and process of the day, and share wishes for tomorrow

Wednesday 24 September

Time	Subject	Purpose / Content
09:00-09:10	**Objectives and agenda**	To remind ourselves of the agenda for the day
09:10-11:10	**How to grow 'Better Cotton' in Tajikistan**	**Group work presentations and discussions** 4. Fibre quality 5. Equitable access to responsible finance 6. Crop protection 7. Effective producer organisation 8. Habitat conservation 9. Soil health
11:10-11:30	BREAK	
11:30-13:00	**Summarising the workshop**	Summarise outcomes of meeting, review objectives Clarify next steps for Tajikistan Close

Annex 3 - List of participants

GOVERNMENT OF TAJIKISTAN

Deputy Prime Minister	Murodali Alimardon
Minister for Agriculture	Kosym Kosymov
Ministry of Agriculture	Muhamadi Ormonov Salohiddin Murodov Amridin Kosymov
Ministry of Amelioration and Water Resources	Kodir Aliev

PRODUCERS (COTTON FARMERS)

Farm Fayzi	Tochidin Dostiev
Farm Firuz	Gufron Isroilov
Farm Humshahid	Mohmadsharif Halimov
Farm Madalieva	Tuichiboi Isroilov
Farm Mehnat	Uboidullo Shoripov
Farm Yussuf	Hakrizo Yusupov
Sughd Agro Serv	Abdusattor Khaidarov
Farm department of Sugda	Otabek Hodjiev

ENVIRONMENTAL ORGANISATIONS, INTERNATIONAL AND LOCAL NGOS

AAT (Agribusiness Association of Tajikistan), Khatlon	Ibodullo Negmatov Navruz Miraliev
ACTED (Agency for Technical Cooperation and Development	Javlon Hamdamov Rano Mansurova
Aga Khan Foundation	Ozodhon Davlatshoev
Better Cotton Initiative	Anna Bexell Lise Melvin
Oxfam GB in Tajikistan	Andy Baker

AGRONOMIC EXPERTS/RESEARCHERS

CECI / Facilitating Agriculture Reform and Marketing in Sughd (FARMS) Project	Dilorom Boquikhodjaeva
National Association of Dehkan Farms	Shavkat Bazarov Azizbek Sharipov

SUPPLY CHAIN ACTORS

Cooperative of Davrona Nuridinova	Nazarbek Sharipov
ECOM	Jean Louis Simons David Rosenberg Boris Spassky
Helvetas/ICCO	Jamilya Yusupova

Reinhart	Mikhail Statsenko Lailo Aini

DONOR GOVERNMENTS

Swedish International Development Cooperation Agency (Sida)	Arne Hede Jamshed Sanginov
Sida / Support to Seed Industry Development in the Republic of Tajikistan	Muhamadi Muminov
UK Department for International Development (DFID)	Dylan Winder
Swiss Agency for Development and Cooperation (SDC)	Anna Schwarz

INTERGOVERNMENTAL AGENCIES

European Bank for Reconstruction and Development (EBRD)	Sabina Dziurman Mark Hughes Matthieu Le Blan Bakhtiyor Mansurov Yulia Levakova Shahnoza Solieva
EC Delegation	Zulfia Davlatbekova
EU / Land Policy and Agricultural Reforms	Husniddin Kuziboev Malika Djurakulova Gerard Deshayes
EU Tacis/SENAS (Support to the Establishment of a National Agricultural Advisory Service)	Beate Schoreit
Food and Agriculture Organisation (FAO)	Tsukasa Kimoto
IFC – South Tajikistan Cotton Lending Project	Raiomand Billimoria
International Labour Organisation (ILO)	Muhayo Khosabekova
United Nations Children's Fund (UNICEF)	Rodni Phillips
UN Coordination Unit in Tajikistan	Michael Jones
United Nations Development Programme (UNDP)	Nalisher Djuraev
UNDP - Slovak Republic	Jürg Staudenmann Rastislav Vrbensky
UNDP - Tajikistan	Sukhrob Khoshmukhamedov Farid Garakhanov
United States Agency for International Development (USAID)	Ubaidullo Mirvaiduloev Fozil Abdurashidov Bogsho Miralishoev
World Bank	Bobojon Yatimov

NATIONAL FINANCIAL INSTITUTIONS

Agroinvest Bank	Mahmadali Saidov
Amonat Bank	Gulnora Hasanova
Bank Eskhata	Nosir Orifov
First Microfinance Bank (FMFBT)	Abdukayum Hoknazaro Saidmumin Saydulloev
JSC Olimi Karimzod-M	Djamshed Abdulov
Tajik Agricultural Finance Facility (TAFF)	Hugo Weissen Christophe Cordonnier Karrin Derflinger
Tajprom Bank	Ahror Gulov

BIO LAB

D/H “Azizova”	Ishokjon Ismoilov
D/H “Boimatova”	Malohat Holmatova
D/H “Samadov”	Kosim Soliev