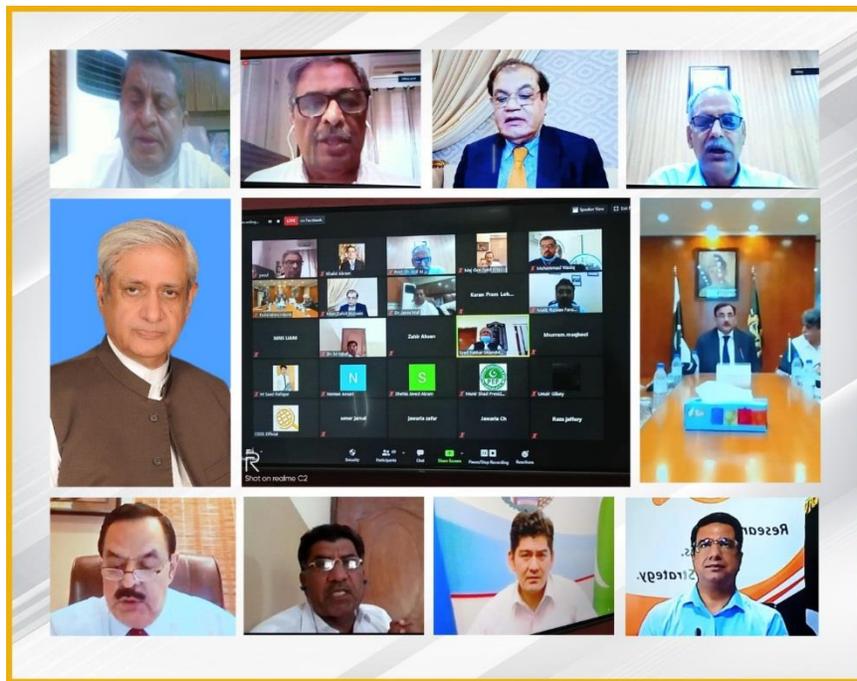




Online Conference Report

“Problems Faced by the Cotton Industry in Pakistan”



Organized by
Center for Global & Strategic Studies, Islamabad on
10th August 2020

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Brief of The Conference

On 10th August 2020, Center for Global & Strategic Studies organized an Online Conference on “Problems Faced by the Cotton Industry in Pakistan” to discuss the various issues faced by the cotton industry in Pakistan including the production challenges, quality deterioration of cotton and the limited variety of seeds in the Cotton Industry of Pakistan. The Conference was attended by 50 participants and was moderated by Lieutenant Colonel Khalid Taimur Akram (Retd), Executive Director, CGSS.

Opening Remarks:

- Major General Syed Khalid Amir Jaffery, HI(M), (Retd) - President, Center for Global & Strategic Studies (CGSS)

Guest Speakers

- His Excellency Syed Fakhar Imam, Federal Minister for National Food Security and Research
- Mian Anjum Nisar, President, Federation of Pakistan Chambers of Commerce & Industry
- Mian Zahid Hussain Convenor, Federation of Pakistan Chambers of Commerce & Industry
- Dr. Yusuf Zafar, Former Chairman, Pakistan Agriculture Research Council (PARC)
- Prof. Dr. Asif Ali, Vice Chancellor, MNS- University of Agriculture, Multan
- Dr. Jassu Mal, Former Chairman, Pakistan Cotton Ginners Association
- Prof. Dr Muhammad Iqbal, Department of Plant Breeding and Genetics, Islamia University of Bahawalpur

1. Overview

- a) The objective of this report is to highlight the cotton growers and the cotton industry, and improve the future health of our National Economic Ecosystem by proposing Cotton Vision 2030. Under this vision, it is proposed to enhance the production of cotton in the next ten years.
- b) It would also provide structural guidance in managing Pakistan's agriculture ecosystem and improve the linkage between the farms and industries. The report includes the recommendations about modern farming and improve the efficiency of the ginning industry and in enhancing their capabilities with modern ginning setups.
- c) Moreover, the vision is directed to upgrade and modernize the ginning industry, improve fiber quality, cotton production, and help us sustain self-sufficiently in our textile industrial raw material to help improve the textile supply chain.
- d) The production of cotton is the primary component of a long value chain in food (edible oil), feed, and fiber. Cotton is grown on over 30 million hectares in 80 countries. However, 70% of world cotton is produced in Asia (China, India, and Pakistan).

2. Historical Background of Cotton Industry in Pakistan

- a) Pakistan is the fourth largest fiber producer and third largest exporter of raw yarn and has huge potential. Cotton crop production has played a major role in Pakistan and the major breakthrough historically was between 1985 and 1992. Till 1984, the cotton bale production could not exceed 4.5 million bales.
- b) There are around 1100-1200 ginning factories in Pakistan and almost 450 spinning factories in Pakistan. Cotton makes up 60 percent of Pakistan's total exports. In America there is a museum in which it is written that Cotton is the origin of Pakistan's river Indus. We should feel proud of our cotton. Job security is another major factor which makes cotton an important crop for us.
- c) With the help of the Cotton Plant breeders (in Faisalabad and Multan etc.), the cotton bale production increased from 4.5 million in 1985 to 12.8 million in 1992. Pakistan experienced such a major paradigm shift in Cotton production in 1991.
- d) However, this production level could not be sustained. This was mainly due to the Cotton Curl Leaf Virus which affected the Cotton crop. This resulted in reduced cotton production for the next 7-8 years. It dropped as low as 7.5 million bales.

- e) In the early part of the century, genetically modified varieties of cotton were introduced in Pakistan. The genetically engineered varieties had Bollgard-1 ingredient in them which led to the increased production of cotton bales.
- f) In the 80s, Pakistan was one of the leading countries when it came to cotton cultivation but we could not maintain that and have fallen behind the rest of the countries. Pakistan needs to focus on its Research and Development sector to identify the factors which have resulted in Pakistan falling behind in the cotton yield production as compared to the other countries.
- g) Pakistan's cotton sewing has reduced considerably over time. If Pakistan manages to improve cotton production, it will automatically reduce the cost price and will help in increasing the sewing area for cotton. Improved cotton cultivation will eventually lead to satisfied landlords and farmers.

3. Challenges/Issues in the Cotton Industry of Pakistan

- a) In the last twenty years, Pakistan has surpassed the 14 million cotton bales production target. Unfortunately, that could not be sustained due to the lack of enhancement in seed technology. The major issue Pakistan has continued to face is that of Seed Technology development.
- b) Although Pakistan had the Seed Act of 1976 with new factors introduced in it, still there were multiple challenges. During that time, many other countries made significant progress in this field for example China, India and Australia made noteworthy progress.
- c) In the last few years, the profitability for Cotton Growers has remained comparatively lower than the other crops like Rice, Sugarcane, Corn, Maize etc. and so the farmers started switching to other profitable crops. This resulted in reduced cotton production by 25-27 percent and most of it was diverted to Sugarcane.
- d) Minimum Support Price has been provided, by the Government, only to Wheat because it is Pakistan's major strategic crop. Minimum Support Price for Cotton crop was there for example in the 1990s, but since the last 20 years, there has been no Minimum Support Price for Cotton.
- e) Along with other challenges for the farmers, like initially the issue of Cotton leaf curl virus, and then for the last few years, cotton production has been majorly affected by various pests like the pink bollworm and whitefly. Even today, it remains a major challenge for cotton cultivation.

- f) We have also noticed that whitefly pest has developed resistance against several chemicals and thus the effectiveness of the chemicals has eventually reduced now. This has resulted in the increase of overall cost of production. In addition to these, there was no minimum support price for cotton producers. Hence, the profit received by the farmers was very low.
- g) Pakistan, due to several reasons, lagged behind other countries such as Bangladesh, which last year exported approximately 38 Billion of garments alone and has created a supply chain and linkage of market all around the world.
- h) One of the factors identified is the Contamination factor in Pakistan's which is relatively higher. This is because farmers in Pakistan are not paid based on the quality of cotton, but the quantity of cotton. Also, in Pakistan when cotton is hand-picked it gets contaminated. This needs to be addressed.
- i) It is suggested that the farmers producing good quality cotton should be paid high profit which will eventually help in reducing the contamination rate in the cotton produced. Hence, improving the overall quality of the cotton production in Pakistan. For the long term promotion of Pakistan Cotton, this factor needs to be addressed.
- j) In addition to this, another important challenge is that of seed quality. There are two important aspects of this. Bags of the ginned seeds should be marked according to its quality. There is a need to pay due attention qualitative aspects thereby leading to a paradigm shift in cotton seed technology. Even though Pakistan has conducted research in this area but not to the level of research work done by the rest of the world.
- k) Pakistan's cotton yield per hectare is 700 kg per hectare. Most of the countries are producing almost double than this. One of the main reasons is the Seed quality. In the recent cotton production season, we had to lower the germination percentages as it could not meet the normal criteria. At present, Pakistan's total requirement of cotton seed is 40,000-45,000 ton.
- l) Punjab Seed Cooperation, formed in 1976 with the help of the World Bank, once used to provide 30 percent of the total number of seeds required for cotton production in Pakistan. It was quite an achievement that such a large percentage was produced by a single platform. It had around 6000 acres land. That helped in maintaining the overall quality of the cotton seeds.

m) Today, Punjab Seed Cooperation has a very limited research scope and so neither we are getting the good quality seed nor its desired multiplication and also has led to its replacement by large number of private sector companies. This has therefore led to the deterioration of the seed quality.

4. Challenges to the Cotton Ginners

- a) There is a sales tax of 5 percent on oil cake for the last 2-3 years. The Ginners Association has been actively working for a few years against the respective sales tax. Unfortunately, the ginners have been struggling for the last 3 years for the revision of the taxes and thus are unable to pay due attention to cotton production.
- b) Also, there is a cotton fee imposed on the ginners. The Ginners Association along with FPCCI has been working together for the removal of the cotton fee. These are a few of the challenges faced by the ginners association which hinders the overall progress of their work.
- c) Another challenge faced by the cotton industry stakeholders is the reduction in the size of the land by 12 percent. Other issues include water availability, seed quality, pesticides, etc. Hence, most of the time of these ginners are consumed by these challenges.
- d) For the past 3 years, the ginners have been fully consumed by the challenges and have not been able to spare quality time for their businesses. For these ginners to focus on their businesses, they need to be facilitated.
- e) Since 2019, the cotton cultivation land has reduced by 12 percent and the production has decreased by 17.5 percent. In America, even though the cotton cultivation land has reduced in size but the production has still increased by 21 percent. This is due to the use of better technology, better irrigation, use of quality seeds, etc.
- f) An accurate analysis of the cotton production should be presented to the government. Best practices from all around the world must be followed. Cotton practices of China, Brazil etc. must be observed.
- g) Most of the problems faced by the cotton industry in Pakistan are related to policy initiatives. The challenge faced by the cotton industry in Pakistan is of Low Production. This problem can be solved through the farming community/ Cotton growers.

5. Analysis/ Suggestions

- a) There are few factors regarding the cotton seed which are to be carefully analyzed. First is the approval process of seed varieties? Also, out of the approved seed varieties, analyzing how many successfully produce results? Only the effective seed varieties which can give better yield per hectare are preferred by the farmers.
- b) In the past, majority of farmers preferred cotton cultivation but with time, they have realized they were making low profits from cotton cultivation. Consequently, many farmers in South Punjab have now diverted from the cotton cultivation to other crops.
- c) Policy making has a major role to play in this situation as certain other crops were promoted at the cost of cotton which negatively affected the cotton cultivation. The imbalances resulted are now being addressed through a few of the policy initiatives.
- d) We plan to devise a strategy, in collaboration with Sindh and Punjab government, for the promotion of cotton cultivation. The aim is to provide the farmers with good quality cottonseed at a subsidized rate. If good quality cottonseed is provided to the farmers then it is likely to result in high cotton yield per hectare.
- e) In today's inter-connected world where the flow of information is easy, our researchers need to collaborate with international researchers of advanced countries to learn and get benefitted from their experiences. We need to collaborate on areas including agriculture education, agriculture research and the extension system.
- f) China had a breakthrough in cotton cultivation and is now the second-largest cotton producer in the world. Having fraternal relations with China and further strengthening of bilateral relations through CPEC can help Pakistan in enhancing cooperation in area of research in the agriculture sector and the extension system so that they can apply the latest research to increase their yields.
- g) Qualitative aspects of the cotton cultivation must be given due attention. The ginning industry in Pakistan needs to be upgraded. Similar to that of Turkey and many other countries, Pakistan needs to update towards roller gins. Even though roller gins were introduced in Pakistan on an experimental basis but they were not promoted at policy level.
- h) The spinning sector is another important factor. Our 70 percent of the total cotton is spinned at 20 counts which is very low. This need to be conducted at higher pace as it increases the value addition.

- i) The training sessions for the workers in the extension sector must be conducted regularly. Solar Tube wells, Drone technology, on farm water management, laser leveling etc. will contribute to higher production and higher yield.
- j) An economic breakthrough in Pakistan is possible by concentrating on cotton cultivation. Research, effective extension system, farmers' training, agriculture education, technological assistance from advanced countries, and Cooperation with China are a few of the important factors that will eventually contribute to the bright future of cotton cultivation Pakistan.
- k) Our growers and ginnerers mostly live in rural areas and they are unaware of the international trends, and modern technology. There is a lack of awareness in our farmers, ginnerers, and spinning industry. If we talk about Fiber, for example, our model is very old and the local ginnerers who have this outlet are not educated or literate. They only work according to their minimum understanding and capacity. No one knows about the length, quality and characteristics of the fiber.
- l) There are taxes on ginned cotton in Pakistan and growers have to pay those taxes. If you make fertilizers and pesticides tax-free than our farmers will get these at low prices from the market and they will be able to compete and produce better growth.
- m) Last year, there was no seed germination but now is the time that the government must take action. The Pakistan Cotton Ginnerers is ready to work with the government but the only help we need is in the cotton ginning and the rates of cotton and seeds.
- n) We should work on the seed quality and give awareness to the grower. And the ginning processing must be started by rollers. By using rollers our fiber quality is increased and automatically our 90% issues will be solved by using a roller jet. All stakeholders should keep the national interest in mind and work towards development.
- o) For the improvement of cotton cultivation, the government is working towards finalizing a JV with MONSANTO regarding BT cotton. Many countries of the world have adopted BT cotton and have been able to produce good quality cotton as their cotton seed quality is good. The use of BT cotton reduces the amount of pests control and requires less fertilizer.
- p) Landlords have various alternatives now like sugarcane industry, rice, maize, etc. The textile industry also has choices available and can import cotton. But when it comes to

ginners, they are ultimately the ones who gravely suffer due to the unavailability of the cotton.

- q) In the rest of the world, the ginning industry mainly deals with cotton research and seed system. In Pakistan, unfortunately, the cotton industry did not own cotton crop, like the sugarcane industry or rice industry owned their respective crops. This has led to the deteriorating situation of cotton cultivation in Pakistan.
- r) There are opportunities present when it comes to the expansion of the cotton industry. After Bollgard was introduced in Pakistan, it deteriorated because it was not used according to a system. This year, despite the reduced area of cotton cultivation, the quality of the cotton produced is better than the previous years. Hence, when technological advancements are done, the overall quality of the cotton will eventually improve. It is also important to note that improvement also requires learning from past mistakes.
- s) Despite all the challenges, according to the ICAC in United States, the production of India per acre yield is 580 whereas Pakistan's per acre yield is 703. The production in Sindh is considerably better and increasing with time.
- t) The Cotton Seed Sector is declining for multiple reasons. This year Seed germination rate of 55% was compromised by our regulators (FSC&RD +PSC). There is a strong need for strict implementation of globally acceptable standards of > 90%. No compromise should be made on quality.
- u) Similarly, the purity/quality and truthful labeling on Pesticides should be implemented in letter and spirit. Sufficient laws/regulations/guidelines are available with the regulating agencies.
- v) The GOP should take lead in investing in R&D of Cotton (like rice, wheat sugarcane, etc.) and get rid of its dependence on "Cotton Cess". A PC_1 was already approved by Planning Commission for Rs 1000 million/year for 03 years to develop an Endowment Fund exclusively for Cotton Research. There is a strong need to revive this PC-1 for the allocation of funds. It is sustainable and gets rid of cess and other clutches for all times to come.
- w) A SMEDA Report developed by French Experts provided valuable recommendations. There is a need to implement its recommendations.

- x) The cotton bales size should be kept at the national standard of 170 Kg. This should not be compromised as it resulted in many complications in planning, storage, transportation, and taxation.
- y) Serious efforts should be made for re-launching Cotton Future Business (Hedge Market) on the platform of Pakistan Mercantile Exchange (PMEX). This IT-based service of an autonomous body under SECP is now well set to take up cotton sale/purchase's future business. This will bring stability and provide free access to farmers, ginners, and spinners to have flexible and assured access to the raw material at a fair price. It will be a win-win situation for all the stakeholders.
- z) There is a need for a comparative study of Pakistan's Cotton industry with advanced countries and their progress.
- aa) With the introduction of new technology, there is a system that focuses on the regulatory mechanism. It is the seed stewardship. After the decline faced by Seed Cooperation, the private sector emerged. So the Seed Stewardship must be focused upon.
- bb) An overall analysis of the cotton sector is required where the ginning industry needs to be placed correctly and should own the cotton industry. Also, in this process, all the stakeholders such as textile industries, spinners, ginners, designers etc. need to come together and play their due role. Not everything can be left to the government. Everyone has to play their part.
- cc) Furthermore, advancements in technology are also required. The government needs to create conditions to encourage growers and ginners to compete globally. To help the farmers compete, the government needs to assist them in reducing the cost price. In this case, measures such as removal of pests control sales tax, removal of fertilizer sales tax can be useful. The electricity cost must also be reduced for farmers.
- dd) The same varieties of cottonseed are used in all provinces but cotton yield in Sindh and Balochistan are much higher than cotton yield in Punjab. In Punjab, the Cotton Leaf Curl Virus has been a major problem since the very beginning.
- ee) When talking about increasing cotton production, it is important to know the plant type Pakistan is using. The Plant types used in Australia and other countries are different than the ones being used in Pakistan. The plant types used by Australia and other countries are

modified according to their environment. Hence, to increase cotton production, plant types in Pakistan need to be changed and new technology is to be incorporated.

ff) The plant type that matures in 120 days should be used in Punjab. Also, planting time in Punjab should be the last week of May or the first two weeks of June.

gg) The gap in R&D should be filled. Researchers must be given some incentives so that they are more dedicated to this research. Special projects or assignments must be designed on CLCV and Plant type.