

## **CHAPTER - 6**

### **CHALLENGES OF AGRICULTURAL PRODUCTIVITY IN TELANGANA AND HARYANA**

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#### **6.1 Introduction**

This chapter deals with the challenges of agricultural productivity in Telangana and Haryana. We have taken four indicators to understand the challenges of productivity in both states; fertilizer consumption, area productivity, climate conditions and irrigation. These indicators have large variations in both states. These indicators have been analyzed in this section of study. This chapter consist the challenges which have been found during the study. These challenges are as follows:

#### **6.2 Challenges in Telangana fertilizer consumption**

The consumption of fertilizers in Telangana has remained 19.40 lakh metric tons in 2014-15. The highest consumption of fertilizers was 14.81 lakh metric tons in 2010-11 which decreased in the year 2013-14 to 13.39 lakh metric tons and to 12.48 lakh metric tons in 2014-15. The highest per hectare consumption of fertilizers was in Karimnagar district and the lowest was in Medak district. However, accurate predicting of fertilizer demand is important for both; firms producing fertilizers importing and for governments in their efforts to monitor the development of agriculture. The demand for fertilizers depends on the variety of agro-economic factors which is fixed nor is it agreeable to correct forecast. If vessels arrive through before the season, it is possible to move fertilizer direct from the port to field stores in the consuming areas. This avoids the costs of extra management and storage in moving stocks to primary points for onward sale to wholesalers. In state where the private sector dominates the marketing system this procedure is practiced with a high degree failure. The consumption of fertilizers is as important a factor as their production. There should be appropriate balance in the consumption of different fertilizer nutrients. The appropriate NPK ratio under Telangana soil conditions is stated to be 4:2:2 in the matter of nutrient balance which is of great long term significance for the Telangana agricultural economy. Apart from the need for increase

in the consumption of fertilizers in appropriate ratio, there is a need to evenly spread the consumption of fertilizers all over the state. The studies have shown that lack of irrigation and lack of credit were the two main stumbling blocks that came in the way of maximizing the consumption of fertilizers. Further, the emphasis is shifting in favour of water-shed concept. In order to encourage consumption of fertilizers in rainfed areas, it would be useful to have a state project for fertilizer use.

### **6.2.1 Irrigation and Fiscal challenges**

The well-known challenges in agriculture are: public and private investment in agriculture, land issues including land reforms, research and extension, irrigation and water management, credit, marketing, domestic and trade liberalization, diversification while maintaining food security and institutional reforms. All these issues have to be addressed for improving agricultural growth and incomes of the farmers. Telangana district represents vast lump of characteristic assets of the current Andhra Pradesh. The 10 regions in this locale represent 45 for each penny of Andhra's woods spread. The locale involves 68 percent for every penny of the catchment region of the Krishna River and 79 percent for each penny catchment zone of Godavari waterway. Using these assets for the improvement of the locale will be a major test for the state. Most significant among these will make water accessible to the dry season inclined regions of the district.

At the point when Andhra Pradesh was divided, the current disagreements regarding the Krishna and Godavari waters among Telangana and different districts of AP turned out to be significantly more genuine. Krishna Waters Question Tribunal honored offer in the Krishna waters to three states namely Maharashtra (560 thousand million cubic feet or TMC), Karnataka (700 TMC) and Andhra Pradesh (800 TMC) (1 TMC parallels 28.3 billion liters). Inside Andhra Pradesh, 68.5 percent of the Krishna's catchment region is existing in the Telangana locale, yet the water assigned to Telanagana was only 34.73 percent for every penny while waterfront Andhra with 13 districts for each penny of the catchment range got 48.5 percent for each penny and Rayalaseema with 18.3 percent for every penny catchment territory got 16.7 percent for every penny of the Krishna waters.

The individuals who needed a different state had relentlessly brought up this was against the universal rules of sharing waters. Their contention was that Telangana had been a different state, the case of Telangana would have been at the very least 548

TMC. Be that as it may, what it got was 277.86 TMC only 50 percent of its legitimate offer. The promoters of Telangana had brought up that the locale was denied of even the distributed amount of water by the state government. The Godavari Waters Debate Tribunal in 1975 granted 1,480 TMC to Andhra Pradesh. Inside the state, 79 percent for every penny of the waterway catchment range is in Telangana while 21 percent for each penny is in beach front Andhra. As indicated by the supporters of Telangana state, passing by the catchment zone, Telangana district ought to get 1,169 TMC of water, when it turns into a different state.

Regardless of the fact that the new state gets the offer of water according to its requests Watering system is a profoundly delicate and political issue in Andhra Pradesh. Aside from Sriramsagar venture and Sri Arthur Cotton Flood, there are no other real developments over the Godavari River in Andhra Pradesh. Till 2004, the state used just 700 TMC of water. Notwithstanding, In 2005, to address the burdens of ranchers, essentially in the lastingly dry Telangana and Rayalaseema locales, the then boss clergyman Y S Rajasekhara Reddy started the "*Jalayagnam*" a Rs 186,000 crore aspiring watering system program containing 86 watering system ventures. Among these ventures, Indirasagar and Polavaram Undertaking are proposed in West Godavari region in beach front Andhra while numerous other super tasks, for example, Pranahita-Chevella, Dummugudem, Yellampally and Kanthalapally are in Telangana. Be that as it may, considering the enormous expense and amount of force required, finishing these ventures will be a colossal test before the new state.

Since the Godavari is streaming three to four meter underneath the area level in Telangana, all anticipates under development are lift watering system plans requiring colossal amount of force. The Pranahita extend alone will require 3,466 MW power, just about 33 percent of the present aggregate introduced power area limit of Andhra Pradesh 16,300 MW. The expense of Pranahita undertaking expense is Rs 40,000 crore as per 2011-12 gauges. The task is to be finished in 2018. The Andhra Pradesh government has effectively spent Rs 3,000 crore on this anticipate. Presently the obligation of finishing the task will be the cerebral pain of the new government. The expense of Kanthalapally venture in Warangal area is evaluated at Rs 23,000 crore. It needs 1,000 MW power. The expense of Devadulla venture in Khammam locale is evaluated at Rs 10,000 crore. The Andhra Pradesh government has spent Rs 6,500 crore on this anticipate. Since 2005, the Andhra Pradesh government has effectively

spent Rs 30,000 crore on watering system ventures. The yearly assignment for watering system has been around Rs 15,000 crore for the last three fiscals. Satisfying the watering system dreams will be a genuine migraine for the new state. It won't be in a position to either relinquish or take forward the undertakings.

### **6.2.2 Capital burdens**

While the issue of watering system can be a major test for the new state once it is framed, the prompt bone of conflict between the Waterfront Andhra, Rayalaseema and Telangana is the division of Hyderabad. *"Hyderabad represents 70-72 for every penny of the state's income. The status of Hyderabad will choose how the income is shared between the two states. This will be significant for the improvement and guide for both Andhra and Telangana. The right photo of the genuine difficulties will rise then"*, says famous business analyst and previous Arranging Commission part C H Hanumantha Rao. A B K Prasad, senior columnist who has filled in as editorial manager of numerous Telugu daily papers and previous director of Authority Dialect Commission, had an alternate point of view. He portrayed the interest for a different Telangana state as *"amusements played by unemployed government officials attempting to pick up force and position"*. *"Backwardness of Telangana is false battle. The Srikrishna Commission which tested the Telangana matter had in its report said that Telangana is not in reverse. Truth be told, the genuine in reverse area is Rayalaseema and the north beach front Andhra. There are not very many in reverse pockets in waterfront Andhra. Partition is not an answer for improvement. The administration ought to concentrate on genuine advancement of the regressive districts"*, said Prasad. On the off chance that Telangana is isolated it will be a genuine noose around the neck of the Focal government, he said. Vidarbha, Gorkhaland, Bodoland are in line with their requests for isolated statehood. Tribal territories in Andhra Pradesh have requested a different state with Bhadrachalam as the capital, he brought up.

### **6.3 Rainfall challenges**

The State of Telangana is semi-arid. The average annual rainfall in the state is around 906 mm and 80 percent of which is received from the south-west monsoon (June-September). The rainfall in the State is irregular and uncertain and delivery of the rain fall is uneven in numerous mandals, thus, making agriculture a proverbial gamble in monsoon. Of the rainfall received during the period from 2004-05 to 2013-14, the yearly actual rainfall was lowest in 2004-05 with 614 mm whereas it was the highest in 2013-14 with 1212 mm as against normal rainfall of 906 mm in the state. The actual rainfall received throughout the South West Monsoons (June - September) period for 2013-14 was 852 mm as against the normal rainfall of 715 mm, recording a surplus of 19 percent. Rainfall received throughout the North East monsoons (October- December) period for 2013-14 was 243 mm as against the normal rainfall of 129 mm recording a surplus of 88 percent. Another challenge is scarcity of water table

### **6.4 Fertilizer consumption challenges of Haryana**

The consumption of fertilizers in Haryana is as important a factor as their agriculture production. There should be appropriate balance in the consumption of different fertilizer nutrients. The appropriate NPK ratio under Haryana soil conditions is stated to be 4:2:1 in the matter of nutrient balance which is of great long term significance for the Haryana agricultural economy and strategy measures on balanced use of fertilizers have to be initiated. Apart from the need for increase in the consumption of fertilizers in appropriate ratio, there is a need to evenly spread the consumption of fertilizers all over the state. The studies have shown that lack of rainfall and lack of credit were the two main uncertain blocks that came in the way of maximizing the consumption of fertilizers. Further, the emphasis is shifting in favor of water-shed notion. In order to encourage consumption of fertilizers in rain fed areas, it would be beneficial to have a state scheme for fertilizer use. At the same time Bio-fertilizers are low-priced, renewable and eco-friendly, with great potential to complement plant nutrients if applied correctly; though, they are not a substitute to chemical fertilizers. They recover health of the soil. Since it provides nutrients to soil in a small and stable manner but its instant effects are not very visible. Sales of bio fertilizers in the country has not selected because of lack of knowledge and its slow effect on the

productivity of the soil. Use of bio fertilizers is needed to maintain the soil's health as more and more use of chemical fertilizers kills all the bacteria available in the soil, which are so essential for maintain the soil health. Supplemental use of bio fertilizers with chemical fertilizers can help maintain the soil fertility over a long period.

## **6.5 Challenges of irrigation in Haryana**

### **6.5.1 Lack of ground water level**

Groundwater level in Haryana is falling very fast speed intimidating the future of agricultural output in one of the largest agricultural states of the country. Recent data collected by the ground water wing of the state agriculture department revealed that most districts in the state have seen critical fall of 7.29 meters, on an average, in the past 12 years. While southern Haryana's central point Mahendergarh district has noted the biggest fall of 19.45 metres, Fatehabad district is at number two with reducing of 15.79 meter's. Jhajjar and Rohtak districts have witnessed smallest depletion of 0.18 and 0.21 meter's respectively.

According to Sanjiv Chadha, hydrologist, department of agriculture, Haryana, the major reasons behind this phenomenon is urbanization, scarce rainfall and deforestation. He also termed overexploitation of groundwater by digging bore wells as a foremost factor, because of which, proper recharge of water could not take place. The state has around seven lakh tube wells for agriculture purposes while there are more such wells being used for other purposes.

### **6.5.2 Lack of land**

Out of total physical area of 44.23 lakh hectares, about 50 percent area is harshly affected with the problems of soil erosion, alkalinity, salinity and water logging. The soil erosion occurs mainly due to lack of water, plants and wind. The soil deterioration through water occurs mainly in the areas falling in Shivalik foothills and in Araveli ranges. It is estimated that about 5.50 lakh hectare area is affected from this problem, although around 12 lakh hectare areas is affected with wind erosion which occur mainly in South-Western part of the State. An area of 2.32 lakh hectares is affected with alkalinity of changing degree and 2.55 lakh hectares with salinity and water logging. While, several externally, centrally subsidized and State schemes are being implemented in the State. Under these schemes, Soil Conservation measures are taken up on watershed basis, which include construction of check dams, water

harvesting structure, gully plugs, filtration banks, diversion bunds, asexual measures etc.

## **6.6 Rainfall challenges**

Highlighting suburbanization as a key factor, Chadha said that an agriculturalist requires water for his crops for a precise period, but due to development and concrete roads, the rainwater is not getting absorbed, affecting the process of groundwater recharge. Farm experts had termed the situation as disturbing and having an adverse impact on agriculture production in the state, he said. As against a target of 12 lakh hectares, there will be a deficit of 1.38 lakh hectares of paddy land in Haryana this year. At the same time lack of forest area is also one of the reasons of lack of rains in Haryana.