

Revamping of Provincial agriculture

The Sindh government aims to revamp provincial agriculture by setting up an Agricultural Development Board for removing its structural flaws and accelerating its growth to exploit emerging food export opportunities.

“The board has been set up with a futuristic approach,” says a senior official of the Sindh government, referring to one of the terms of reference that talks about planning “for promoting agricultural trade through connecting points of China Pakistan Economic Corridor.”

“There is no question of outsourcing the functions of the provincial agriculture department. There’s no pruning in the powers of the department. No sharing of its responsibilities.”

The purpose is to cut through the red tape in informed decision making and effective implementation. The board, according to the officials, would rather be a great support to agriculture department in discharging its responsibilities. Its composition is such that all kinds of issues of the agriculture sector can be discussed thoroughly at the board’s platform and immediate responses can be obtained from the decision makers and the stakeholders.

The 27-member board is headed by the provincial minister for agriculture, supply and prices. The director of the World Bank-assisted Sindh Agriculture Growth Project will act as secretary to the board.

The Agricultural Development Board is just one of the several independent boards that the Sindh government has decided to set up to promote various sectors of the provincial economy and governance, senior officials in Sindh government say.

Another TOR says that the board will also explore possibilities for promoting agricultural trade through connecting points of the CPEC. Yet another TOR gives the board the mandate to evolve coordination mechanism between agriculture department and other organizations at provincial, federal and international levels.

The Agricultural Development Board ‘will establish agro-processing industries and agro SMEs near the hub of agricultural products clusters’. Besides, it will also ‘develop liaison with concerned foreign donor agencies to pool all relevant knowledge and resources, foster interaction and communication and provide high-tech training to growers and agricultural research and extension staff’. And, it will also ‘organise international exposure visits and...exhibitions in various countries with the assistance of TDAP’.

New varieties in rice output and exports

Senior official of the Ministry of National Food Security and Research (MNFSR) are of the view that sustainable growth in food crops is crucial to feed the fast-expanding local food industry and boost export earnings.

They are conscious of such considerations and are trying to ensure that food crops output keeps growing consistently. Since this objective cannot be achieved without increasing the per-hectare yields, ‘emphasis is being placed on finding ways for it which also include development of new, high-yielding seed varieties and improving farm productivity by other means, like better pre-and-post harvest losses etc’.

In case of rice, Pakistan Agricultural Research Council approved in the middle of last year seven hybrid and four open-pollinated (OP) paddy seeds for cultiva-

tion, with the hope that these would help boost rice production. Farmers say some of these varieties have come under commercial use and are giving higher per-hectare yield than traditional non-Basmati Irri varieties.

Hybrid varieties were expected to yield up to 3,450kg per hectare output but in most cases actual yields have not exceeded 3,300kg. Progressive farmers say, even at this level, these varieties are worth cultivating. But availability of certified seeds is a big challenge.

The four OP varieties of paddy, now under commercial cultivation in the second year in a row, are believed to be better than the existing Irri-6 and KSK-133 varieties not only in per-hectare yield but also in submergence, salinity and water-stress aspects of the crop.

According to the officials of MNSFR they hope that the output of non-Basmati rice would continue to grow largely due to the newly released hybrid and OP varieties.

Officials say total production of rice during the current fiscal year has been estimated at 6.64m tonnes, down 2.5% from 6.81m tonnes a year ago due to a slight fall in the area under cultivation primarily in Punjab but also in Sindh.

Per-hectare yields of non-basmati rice varieties have reportedly enhanced rice output by 3.6% in Sindh. Analysis of data reveals that is merely a reflection of as much increase in the area under rice cultivation there.



Organic farming a prospect of profitability

South Asian Network for Development and Environmental Economics revealed an interesting research that growing organic crops is at least as profitable as crops nurtured on synthetic inputs despite their low yields in Punjab. The reason behind this is their low input costs and significant high price premium.

Further study reports that organic farms tend to better conserve soil fertility and system stability than conventional farms.

Importance of agriculture in Pakistan economy needs not to be over emphasized. It accounted for 20.9% of the Gross Domestic Product (GDP) in 2014-15 and is a source of livelihood of 43.5% of rural population. However, farmers are under great stress as their profits are shrinking sharply which may pose food security threats to the country's 190m people.

Current farming practices in Pakistan heavily rely on the use of chemical inputs and high yielding varieties. This has led to a decline in soil fertility and loss in topsoil, organic matter and the crop production potential of soils. These problems are especially important in the wheat-rice belt, the breadbasket of northern India and Pakistan, which covers over 12m ha and provides food security for some 500m people. The conventional farming brings small profits due to the continued increases in input costs and stagnant market prices of agricultural outputs (especially major crops like wheat, rice

and cotton) resulting from government interventions that distort relative prices.

Organic farming has the potential to address some of the threats to agricultural sustainability. It is a well-defined method of production that tends to minimize the use of costly synthetic inputs, such as fertilizers, pesticides, herbicides and medical products and makes agriculture environmentally sustainable and economically viable. It avoids nutrient exploitation and increases soil organic matter content.

Soils under organic system capture and store more water than soils under chemicals-used cultivation. Integrated organic approaches also demand more labour inputs. In addition, higher prices can be realized via organic certification. Higher farm incomes are thus possible due to lower input costs and higher sale prices.

This research compares the productivity and profitability of organic and conventional farms that grow two major crops, wheat and rice, based on primary data collected from farms located in three districts-Gujranwala, Sheikhupura and Okara of Punjab. The study shows the overall, input costs are 20% and 10% lower in organic wheat and rice farms relative to their chemical counterparts. The average organic farm produced 14% less wheat and 44% less rice per hectare relative to the average 'conventional' farm.

However, organic crops earn significant higher price premium. The benefit cost ratio is also higher for organic crops as compared to 'conventional' crops. But an interesting question arises: if there is a significant difference in profits, one would expect an all together shift from one

system to the other, which has not been observed. In fact, if fertilizer and pesticides subsidies for agriculture are withdrawn or a subsidy for organics is introduced, there may be a natural shift to organic farming as this would tilt the profit balance.

Belarus' potential in agriculture to be presented in Pakistan

The agricultural potential of Belarus will be presented in Pakistan during the first joint agricultural forum in April, according to the press service of Belarus' House of Representatives.

A Belarusian delegation led by Speaker Vladimir Andreichenko is currently in Pakistan on a visit. Apart from MPs, the delegation also includes representatives of government agencies and companies (Polotsk Dairy Plant, Vitebsk Broiler Poultry Farm, Orsha Meat Canning Plant, Meat and Dairy Company, Biocom, Primemilk, Agrokombinat Dzerzhinsky, Lidselmash, and Gomselmash). They will participate in the first Belarus-Pakistan agricultural forum. Some 100 representatives of Pakistani and 30 Belarusian companies have been invited to attend the forum. "The forum will showcase Belarus' potential in agriculture and production and Pakistan's agricultural potential. Companies of the two countries will hold business negotiations," the press service said. Besides, the participants will sign two documents: a memorandum of mutual understanding and cooperation between the Belarusian company Gomselmash and Zarai Taraqati Bank Limited, and a memorandum of mutual understanding and cooperation between Belarusian State Agrarian Technical University and the University of Agriculture, Faisalabad.

Vladimir Andreichenko and Agriculture and Food Minister Leonid Zayats will give a welcome speech at the forum on behalf of Belarus.

KP governor stresses need for research-based agriculture education

At the convocation of Agriculture University Peshawar the Khyber Pakhtunkhwa Governor Iqbal Zafar



Jhagra it is need of the hour to train students of agriculture by providing them modern and research-based education so that they can compete internationally.

He said being a constituent of the global village, Pakistan has to adopt the knowledge-based and technology-driven modes of production to secure the highest standards in the output of goods and services and asked universities and educational institutions to play key role in this pursuit.

Besides others, Minister for Agriculture Sardar Ikramullah Gandapur, Agriculture University VC Zahoor Ahmad Swati, professors, students and their parents were also present on the occasion.

The governor said the incumbent government was committed to provide financial and material resources but we should not ignore the responsibility of teachers and parents to provide conducive learning environment and encouragement to the students.

He gave away 280 degrees i.e. MPhil, MSc, MA, Bachelors including 17 PhDs to the graduating students. Iqbal Jhagra also felicitated the graduating students who successfully completed their degree programmes. He also praised the vice-chancellor of the University for providing standard education to the students.

Improving the livestock sector

At present, the country has as many as 36.9 million cattle, 32.7 million buffaloes, 28.4 million sheep, 63.1 million goats, 1 million camels, 4.8 million donkeys, 0.4 million horses, 0.2 million mules



and over 1,376 million, as was suggested in the Economic survey of Pakistan 2011-12.

Furthermore, Pakistan is the fourth largest milk producer around the globe, producing approximately 33 billion litres milk per annum. Nevertheless, the dairy sector is at a crucial crossroads with its demand largely overshadowing increases in supply.

Livestock sector plays an extremely significant role in Pakistan's economy; contributing nearly 55.1 % to the agricultural income and in turn, more than 11 % to the Pakistan's Gross Domestic Product (GDP).

This ever-widening gap would increase up to four billion litres by 2017. This may result in decreasing milk supply, however prices are increasing for consumers. Most of the dairy farmers in Pakistan are operating at subsistence levels.

Due to unavailability of an effective knowledge, lack of commercial subsidies and formal linkages to market, they generally have limited opportunities to run profitable businesses. The answer to their grievances is to find out ways to increase per animal yield. In western countries, the average annual milk production per cow is more than 9000 litres per annum.

However, in Pakistan, it is only about 1300 litres. This clearly indicates an urgent need to improve the dairy sector in Pakistan through modern dairy farming techniques.

In order to overcome the shortage of milk and meat in the region, a comprehensive plan has been prepared by the Azad Jammu and Kashmir (AJK) government.

The government has decided to extend all possible assistance and incentives to the private sector to make investments in dairy, poultry and vegetable sectors in the state.

Provision of latest equipment for promoting dairy, poultry and vegetable farms is the foremost priority of the AJK government and that future prospects are bright for investors intending to set up farms for production of dairy, poultry, fish, and vegetable in the area.

The recent establishment of poultry and vegetable farms over one hundred kanals land in Mirpur has provided employment opportunities to hundreds of jobless youth and will help overcome shortage of milk and meat considerably in the area.



The proposed construction of roads and provision of sufficient water and electricity are top priorities of the government for the uplift of this sector, said the official.

The daily production of over 4,000 litres of milk, and fresh vegetables worth thousands of rupees from the latest private-sector farm and how it speaks volumes about AJK's potential in this sector.

AJK government is focused on the promotion of this sector and welcomes private entrepreneurs and investors.

US-Pakistan cooperation boosts Agri Expo

The U.S. Pavilion highlights projects assisting Pakistani farmers to modernize the agriculture sector, strengthen value chains and improve market access while ensuring long term sustainability of agricultural production. The Embassy of the United States of America is showcasing its long-standing support for Pakistan's agriculture sector with a pavilion at the Dawn Food and Agri Expo.

The United States, in partnership with the Pakistan government and the private sector, has provided approximately \$777 million since 2009 to fund projects that support economic growth and agriculture, including the Government of Pakistan's efforts to reform and modernize the agricultural sector.

The Expo's U.S. Pavilion features a number of agricultural assistance programs supported by the U.S. Agency for International Development (USAID) and the U.S. Department of Agriculture (USDA) that help build Pakistan's export capacity, especially in the areas of small and medium sized agribusinesses and agricultural producers.

Supporting economic growth and agricultural development is a top U.S. priority in Pakistan. USAID agriculture projects help increase employment and incomes for producers, processors, and vendors of agricultural products. To boost Pakistan's agricultural productivity, USAID has introduced advanced farming technologies, built additional irrigation infrastructure, and introduced improved water management practices.



USAID also assists agribusinesses in Pakistan to increase their access to financing and more lucrative export markets. These programs focus on the private sector's agriculture investments in Pakistan. Over the past six years, USAID projects have increased exports by \$76 million, increased sales by \$170 million, and leveraged over \$72 million in private sector investments.

Pakistan's agriculture sector has enormous potential, and the Dawn Food and Agri Expo provides an opportunity for Expo visitors to see and hear about the United States Government's support to Pakistan's agriculture sector

250 farmers training on soil fertility

Around 250 farmers were engaged in four training workshops on soil fertility, sustainable rice production and water productivity. Three village training Workshops were conducted in different Agricultural areas of the country, including the parts of District Sheikhpura to equip the small land holding rice growers on latest cultivation techniques.

The capacity building training organized by Rice Partners pvt Ltd (RPL) in collaboration with MARS food and Helvates Swiss Inter cooperation.

Talking to the farmers, Project Manager RPL, Zafar Iqbal said that rice production constituted the major economic activity (21 % of (GDP) and a key

source of employment (44 %) for the rural population of Pakistan.

He said the average yield of rice in Pakistan was far less than other leading rice growing countries. It was inevitable to bring the maximum rice growing farmers in capacity building activities for enhancing their skills on water efficient techniques for sustainable rice production, he added.

Zafar has sensitized the farmers regarding social aspects of SRP standards and said do not involve child labour in agriculture sector.

Chief Operating officer Rice partners Pvt. Ltd, Muhammad Ali Tariq addressed the farmers about the importance of core-relation of UN SDGs and Sustainable Rice Platform (SRP). He emphasized the farmers to excel on water productivity and sustainable production of rice as per SRP standards.

He further explained the outline of WAPRO project & its importance in implementation of Sustainable Rice Platform (SRP). He further highlighted that Pakistan is agricultural country and agriculture sector can serve as shortest pathway for achieving United Nations (UN) Sustainable Development Goals(SDGs).

Project Agronomist, Imran Sheikh addressed to the farmers and said, it's very important to focus on SRP protocols like crop calendar, record keeping, laser leveling, quality seed, water productivity, balance use of fertilizers. ♦