# AGRI. BUSINESS SUPPLEMENT

Zarai Taraqiati Bank Limited





### **Editorial Board**

Mr. Asad Ullah Habib, Head (P, R &T Div) Mr. Nadeem Akhtar Malik, Head (P&RD)

Mr. Muhammad Fakhar Imam, Head (R&PU)

Mr. Ahmed Hussain Khan, OG-II (P&RD)

Ms. Aamna Imtiaz, OG-II (P&RD)

Ms. Humma Nisar, OG-III (P&RD)

Planning & Research Department, ZTBL Head Office Islamabad, Phone No. 051-9252024

Technology for Agriculture



# TABLE OF CONTENTS

FOG HARVESTING	03
AGRICULTURAL REHABILITATION AFTER FLOODS IN	ļ
PAKISTAN	07
ZARAI SIFARISHAT BARAY-E-KISSAN	09
SBP UPDATES	11
MANAGEMENT TIPS	12
NATIONAL NEWS	13
ZTBL NEWS	14

### **FOG HARVESTING**

Data collected and prepared by: Ahmed Hussain Khan, (OG-II, P&RD)

#### **INTRODUCTION**

Fogs have the potential to provide an alternative source of fresh water in dry regions and can be harvested through the use of simple and low-cost collection systems. This innovative technology is based on the fact that water can be collected from fogs under favorable climatic conditions. Present research suggests that fog collectors work best in coastal areas where the water can be harvested as the fog moves inland driven by the wind.

Fog, a cloud that touches the ground, is made of tiny droplets of water each cubic meter of fog contains .05 to .5 grams (half the weight of a



paper clip) of water. Fog harvesting technology consists of a single or double layer mesh net supported by two posts rising from the ground. Mesh panels can vary in size. The material used for the mesh is usually nylon, polyethylene or polypropylene netting (also known as 'shade cloth') which can be produced to various densities capable of capturing different quantities of water from the fog that passes through it. When the fog rolls in, the tiny droplets of water cling to the mesh and as more and more cluster together, they drip into a gutter below that channels to a water tank. Fog collectors,

which can also harvest rain and drizzle, are best suited to high-elevation arid and rural areas; they would not work in cities because of the space constraints and water needs of an urban environment.

Fog collection projects have used from 2 to 100 fog collectors, and depending on the location, each panel can produce 150 to 750 liters of fresh water a day during the foggy season.

The collectors are positioned on ridgelines perpendicular to prevailing wind and capture and collect water when fog sweeps through. The number and size of meshes chosen will depend on the local topography, demand for water and availability of financial resources and materials. Optimal allocation is single mesh units with spacing between them of at least 5 m with additional fog collectors placed upstream at a distance of at least ten times higher than the other fog collector.

The collector and conveyance system functions due to gravity. Water droplets that collect on the mesh run downwards and drip into a gutter at the bottom of the net from where they are channeled via pipes to a storage tank or cistern. Typical water production rates from a fog collector range from 200 to 1,000 litres per day, with variability occurring on a daily and seasonal basis. Efficiency of collection improves with larger fog droplets, higher wind speeds and narrower collection fibres/mesh width. In addition, the mesh should have good drainage characteristics.

The dimensions of the conveyance system and storage device will depend on the scale of the scheme. Storage facilities should be provided for at least 50 per cent of the expected maximum daily volume of water consumed. For agricultural purposes, water is collected in a regulating tank, transferred to a reservoir and then finally into an irrigation system that farmers can use to water their crops.



#### **OPERATION AND MAINTENANCE**

Operation and maintenance are relatively simple processes once the system has been properly installed. Nevertheless, an important factor in the sustainability of this technology is the establishment of a routine quality control programme which should include the following tasks:

- Inspection of mesh nets and cable tensions to prevent loss in water harvesting efficiency and avoid structural damage.
- Maintenance of nets, drains and pipelines to include removal of dust, debris and algae.
- Maintenance of the storage tank or cistern to prevent accumulation of fungi and bacteria.
- Where spare parts are not available locally, it is recommended that a stock of mesh and other components be kept in reserve as local supply might be restricted, especially in remote mountainous regions.

Drought caused by climate change is leading to reductions in the availability of fresh water supplies in some regions. This is having an impact agricultural production limiting on by opportunities for planting and irrigation. Fog harvesting provides a way of capturing vital water supplies to support farming in these areas. Furthermore, when used for irrigation to increase forested areas or vegetation coverage, water supplies from fog harvesting can help to counteract the desertification process. If the higher hills in the area are planted with trees,

they too will collect fog water and contribute to the aquifers. The forests can then sustain themselves and contribute water to the ecosystem helping to build resilience against drier conditions.

#### **ADVANTAGES OF FOG HARVESTING TECHNOLOGY**

Atmospheric water is generally clean, does not contain harmful micro-organisms immediately suitable for irrigation purposes. In a number of cases, water collected with fog harvesting technology has been shown to meet World Health Organization standards. The environmental impact of installing maintaining the technology is minimal. Once the component parts and technical supervision have been secured, construction of fog harvesting technology is relatively straightforward and can be undertaken on site. The construction process is not labour intensive, only basic skills are required and, once installed, the system does not require any energy for operation. Given that fog is particularly suitable harvesting mountainous areas where communities often live in remote condition, capital investment and other costs are generally found to be low in comparison with conventional sources of water supply.

### **DISADVANTAGES OF THE TECHNOLOGY**

Fog harvesting technologies depend on a water source that is not always reliable, because the occurrence of fogs is uncertain. However, certain areas do have a propensity for fog development, particularly, mountainous coastal areas on the western continental margin of South America. Further, calculation of even an approximate quantity of water that can be obtained at a particular location is difficult. This technology might represent an investment risk unless a pilot project is first carried out to quantify the potential water rate yield that can be anticipated in the area under consideration.

#### **FINANCIAL REQUIREMENTS AND COSTS**

The costs vary depending on the size of the fog catchers, quality of and access to the materials, labour, and location of the site. Small fog collectors cost between Rs.8000 and Rs.21, 000 each to build. Large 40-m² fog collectors cost between Rs.105, 000 and Rs. 157,500 and can last for up to ten years. A village project producing about 2,000 litres of water per day will cost about Rs. 1,575,000. Multiple-unit systems have the advantage of a lower cost per unit of water produced and the number of panels in use can be changed as climatic conditions and demand for water vary. Community participation will help to reduce the labour cost of building the fog harvesting system.

Note: The costs mentioned above are exclusive of import duties and other taxes.

#### POTENTIAL AREAS FOR FOG HARVESTING

Research suggests that fog collectors work best in locations with frequent fog periods, such as coastal areas where water can be harvested as fog moves inland driven by the wind. However, the technology could also potentially supply water in mountainous areas if the water is present in stratocumulus clouds, at altitudes of approximately 400 m to 1,200 m."

In Pakistan fog harvesting can be done in the plain areas of South Punjab such as Lahore, Sargodha, Sahiwal, Multan etc. According to the International Development Research Centre, in addition to Chile, Peru, and Ecuador, the areas with the most potential to benefit include the Atlantic coast of southern Africa (Angola, Namibia), South Africa, Cape Verde, China, Eastern Yemen, Oman, Mexico, Kenya, and Sri Lanka.

Right now, fog collection is still useful in a limited range of places ones with large amounts of fog and few other sources of water but that may not always be the case. Several research groups are working on devising better fog collectors made of new materials and designs, which could collect water more efficiently and expand the regions where fog collection could be useful. Fog collectors could make a significant difference to the water supply of many arid regions. A United Nations report notes that "fog collection technology appears to be an extremely promising and low-cost water harvesting system for drinking water, crop irrigation, livestock beverage, and forest restoration in Dryland Mountains.



KEY INFORMATION REQUIREMENTS FOR ASSESSING FOG HARVESTING SUITABILITY

- Global wind patterns: Persistent winds from one direction are ideal for fog collection.
- Topography: It is necessary to have sufficient topographic relief to intercept the fogs/clouds.
- Relief in the surrounding areas: It is important that there are no major obstacles to the wind within a few kilometers upwind of the site. In arid coastal regions, the presence of an inland depression or basin that heats up during the day can be advantageous, as the localized low pressure area thus created can enhance the sea breeze and increase the wind speed at which marine cloud decks flow over the collection devices.

- Altitude: The thickness of the stratocumulus clouds and the height of their bases will vary with location. A desirable working altitude is at two-thirds of the cloud thickness above the base. This portion of the cloud will normally have the highest liquid water content.
- Orientation of the topographic features:
   It is important that the longitudinal axis of the mountain range, hills or dune system be approximately perpendicular to the direction of the wind bringing the clouds from the ocean. The clouds will flow over the ridge lines and through passes, with the fog often dissipating on the downwind side.
- Distance from the coastline: There are many high-elevation continental locations with frequent fog cover resulting from either the transport of upwind clouds or the formation of orographic clouds. In these cases, the distance to the coastline is irrelevant. However, areas of high relief near the coastline are generally preferred sites for fog harvesting.
- Space for collectors: Ridge lines and the upwind edges of flat-topped mountains are good fog harvesting sites. When long fog water collectors are used, they should be placed at intervals of about 4.0 m to allow the wind to blow around the collectors.
- Crestline and upwind locations: Slightly lower-altitude upwind locations are acceptable, as are constant-altitude locations on a flat terrain. But locations behind a ridge or hill, especially where the wind is blowing down slope, should be avoided.

#### **BARRIERS TO IMPLEMENTATION**

Several challenges and issues have emerged from fog harvesting projects implemented to date:

- Where fog is a seasonal source, water has to be stored in large quantities for dry season use.
- If not properly maintained, water quality becomes an issue during low-flow periods.
- Fog water collection requires specific environmental and topographical conditions, limiting its application to specific regions.
- Procurement and transportation of materials is hindered by remote locations and steep terrain.
- Strong winds and snow fall can result in structural failure during the winter season.
- Water yield is difficult to predict, requiring feasibility studies prior to large scale implementation.
- For harvesting to be effective, frequent fogs are needed and sufficient water collected for the investment to be costeffective. This limits the technologies to areas with specific conditions.

### **OPPORTUNITIES FOR IMPLEMENTATION**

Fog water collection has emerged as an innovative technology for mountainous communities without access to traditional sources of water. Still largely in a state of development, there is opportunity for research and development into fog harvesting technology and its potential to support agricultural production. Given the lack of mesh suppliers, using locally available materials for component parts presents an opportunity for local business development. This technology also provides an opportunity to restore natural vegetation and support agricultural practices through the sourcing of clear water for crops and livestock.

Source: www.climatetechwiki.org

# AGRICULTURAL REHABILITATION AFTER FLOODS IN PAKISTAN

Data collected and prepared by: Mr. Fakhar Imam, (OG-I, P&RD)



Pakistan is the 5<sup>th</sup> most vulnerable country to climate change as reported by Inter Governmental Panel on Climate Change (IPCC). It is now common wisdom that all hazards are natural and occur as a result of unjust anthropogenic interactions with nature. Pakistan is vulnerable to most of such natural calamities. It is prone to floods, earthquakes, droughts and cyclone storms. It is prone to famines and heavy monsoons. Recent floods are the example of a huge climatic catastrophe in Pakistan.



Devastating flood 2022 in Pakistan has washed away millions of hectares of agricultural land (Crops, vegetables, Orchards, Oilseeds, Pulses and Livestock). These agricultural losses have huge economic impacts in Pakistan. Rice,

sugarcane, maize and vegetables of Billions of Dollars have already been lost. Such agricultural losses are the serious threat to the country's food security. A report published by United Nations World Food Programme (WFP) had analyzed that nearly 1.9 million people facing food insecurity in flood-affected districts. Pakistan could soon face food shortages if these thousands of acres of crop land are not restored.

The main question arises that what floods have done to the soils and how these soils can be restored? Flooding can significantly alter the level of nutrients available in the soil for plant growth. For example:

- **1.** Soil lost due to erosion can take valuable plant-available nutrients and organic matter with it.
- 2. Deposition of sediments from floods may increase the level of nitrogen, phosphorus, silicon and potassium in the soil.
- **3.** Water soluble nutrients such as nitratenitrogen and potassium can be seeped, passing the crop's rooting depth and potentially into the groundwater.
- 4. Floods stop the microbial activity in the soil so the soil becomes dead for any crop until the microbial activities have been resumed.
- 5. When flood water is allowed to remain in contact with soil for an extended period of time, the soil undergoes changes that can have an impact on its physical, chemical and biological health. When the land is not planted with any kind of crop or cover crop, its biological health is compromised. It is difficult to cultivate crops in soil that is saturated with water because this causes the soil to become oxygen-depleted, which in turn causes plant roots to become suffocated.

Furthermore, if the soil is too wet, the plants' roots may rot, and it may also develop fungal diseases, both of which can ultimately result in the plants' demise.



#### How Soils can be restored?

Crop rotations for wet soils could include water-loving and water-using crops. Seeding into wet soil is a difficult task; however, aerial seeding via drones can be an effective solution to the problem of seeding in wet or flooded soils. Most annual crops can withstand water stress for 3 to 7 days; forage legumes can withstand water stress for 9 to 14 days; and forage grasses can withstand excess water for 10 to 49 days. However, other factors that can influence the tolerance period, such as soil type, plant species and soil temperature must be considered.



### Which crops can be grown of flood affected soils?

In order to use the flood affected land efficiently, the crops capable of boosting soil microbial activity and can be sown in wet soils may be planted. Moreover, the leguminous crops that can fix the nitrogen in the soil and such crops which can be used for green manuring can also be sown in such areas (Oats, Barseem, Alfa Alfa, Soybean etc). These crops can help in restoring soil and makes soil suitable for the next cash crop. Kallar Grass is also an important crop that can speed up microbial activity in any type of soil including saline and sodic/water logged soils. In the flood affected soils, kallar grass can be a magical crop for soil reclamation and making fodder available for livestock/dairy feed.



#### **Food Security after Floods**

Food security has become a serious concern after recent floods in the country. The flood affected people, most of whom were the farmers and rural populace, are now facing food shortages. The demand/supply disturbances in food supply chains have also adversely affected the prices of agri commodities. In order to reduce huge import bills on account of food imports and to overcome food scarcity issues, there is dire need to grow winter vegetables immediately on dry part of land. Kitchen gardening should be promoted and households must plant short duration seasonal vegetables in homes to reduce consumption of available vegetables ensure and availability of food for flood victims.

### سیلاب سے متاثرہ کاشتکاروں کے لیے زرعی سفار شات

## گندم:

ا۔ سیلاب سے متاثرہ وریال زمینوں میں گہراہل چلانے کی سفارش نہیں کی جاتی البتہ دوسے تین ال چلا کر سہا کہ دیں تاکہ زین نرم ادر ہمر ہمری ہو جائے۔ وریال کیپتوں میں دویا تین مرتبہ وقفہ وقفہ سے ہل چلائیں۔

۲۔ اگر سیلاب سے متاثرہ علاقوں میں گندم والی زمین پر کسی اور فصل کے ہاقیات موجود ہوں توایک بارر وٹاویٹر چلا کر باقیات تلف کر دیں اور اس کے بعد بل چلا کر زمین تیار کریں۔ سیلاب کے بعد جہاں پر زمین کالیول خراب ہواہے وہاں زمین کو ہموار کریں۔

سر سلاب سے متاثرہ زمینوں کو خشک ہونے میں تین سے چھ ماہ در کار ہوتے ہیں۔ جو زمین و تر حالت میں آجائے یا خشک ہو جائے تواس زمین کو گندم کی کاشت کے لیے تیار کریں سلاب سے متاثرہ زمینوں پر گندم کی پیجائی کا درست وقت دسمبر کے مہینے میں سفارش کیا جارہا ہے۔

سے سلاب سے متاثرہ زمینوں پر گندم کی کاشت کیم دسمبر سے تیس دسمبر تک مکمل کرلیں۔البتہ کسان اپنی زمینوں کی حالت دیکھ کرا گر ممکن ہو جلدی کاشت کر سکتے ہیں۔

۵۔سیلاب سے متاثرہ علاقوں میں گندم کی بیجائی میں تاخیر ہوگی اس لیے بیہ سفارش کی جاتی ہے کہ گندم کی جلد تیار ہونے والی اقسام کاشت کی جائیں اور جلد مینے والی اقسام درج ذیل ہیں:

مِعْدَ پِيهِ وَالْ السَّامُ وَرَبِي دِيلَ مِن . ( ) . ( ) . ( ) . ( ) . ( ) . ( ) . ( ) . ( ) . ( ) . ( ) . (		
نوعيت	اتبام	
آبیاش علاقے	جنوبی پنجاب کے لیے فخر تھکر، محکر شار، اکبر ۲۰۱۹، غازی ۲۰۱۹، اور زنکول ۲۰۱۲	
بارانی علاقے	بارس ۲۰۰۹، د هرانی ۲۰۱۱، مرکز ۲۰۱۹، اور گولژ ۲۰۱۲	
آبیاش علاقے	TD-1, نیاامبر ۲۰۱۰، نیاسنهری ۲۰۱۰، امداد ۲۰۰۵، نیاسارنگ ۲۰۱۰، سسی ۲۰۰۲	
بارانی علاقے	TD-1، مهران، نیاسارنگ ۱۳۰۳، انمول	
آبياش علاقے	پیرسان ۲۰۱۳، باشم ۲۰۰۷، فرید ۲۰۰۷، باتھو، آس ۲۰۱۱، پاکستان ۲۰۱۳، فخر سر حد	
بارانی علاقے	پیرساِق۲۰۱۵، انصاف، نیفاللم ۱۳۰۲، خانسته ۲۰۱۷	
	شېكار ۲۰۱۳ ، كالا جان شا كوك ۱۷-۲، بور لاگ، ۲۰۱۲	
کی بیدا قسام سیڈ کار پو	ریش،مقای زرعی تحقیقاتی ادارے یالو کل سیر ڈیلر سے باآسانی دستیاب ہوں گے۔	
ا چ کو پھیصوندی کش	د دائی ضرور لگائیں تا کہ آگافی بہتر ہواور بیاریوں سے بچافی ممکن ہو۔	
آبیاش علاقے بارانی علاقے بارانی علاقے آبیاش علاقے آبیاش علاقے بارانی علاقے بارانی علاقے	جنوبی بنجاب کے لیے فخر بھر، بھر سٹار، اکبر ۱۹۰۱، غازی ۲۰۱۹، اور زنگول ۲۰۱۲ بارس ۲۰۰۹، دھر ابی ۲۰۱۱، مرکز ۲۰۱۹، اور گولڈ ۲۰۱۷ TD-1, نیامبر ۲۰۱۰، نیاسنهری ۲۰۱۰، امداد ۲۰۰۵، نیاسار نگ ۲۰۱۰، سسی ۲۰۰۷ پیر سباق ۲۰۱۳، باشم ۲۰۰۷، فرید ۲۰۰۷، با تھو، آس ۲۰۱۱، پاکستان ۲۰۱۳، فخر سر حد پیر سباق ۲۰۱۵، انصاف، نیفاللم ۱۳۰۳، فائسته ۲۰۱۷ شبکار ۲۰۱۳، کالا جان شا کموٹ ۲۰۱۷، بور لاگ، ۲۰۱۲	

ا۔ کماد کی بہار سے نصل میں بار شوں پاسلاب کا پانی موجو د ہو تواس کے نکاسی کا فل فور بند وبست کریں اور اس کے بعد کماد کے فصل میں ہیو مک ایسڈ کی کھاد پانچے سے چھ کلو گرام فی ایکڑ کریں تاکہ مٹی میں حشرات کے عوامل کو بہال کیا جاسکے۔

# کیاس

ا۔ سیلاب اور زیادہ بار شوں کی صورت میں اگر زیادہ پانی کھیتوں میں کھڑاہے تواس کی نکائ کا بند وبست کریں۔ اس مقصد کے لیے کھیتوں کت ارد گرد چھوٹے تالاب یا کھالیاں بنائیں۔

۲۔ جہال پرسلاب کا پانی کھڑا ہونے کی وجہ سے فصل کی حالت کمزور ہو گئ ہے ویاں فصل کی بڑھو تری کو تیز کرنے والے کیمیکل کاسپرے کریں

سو-بارشوں اور سلاب سے متاثرہ کیاس کی چنائی علیحدہ کریں

سم سیلاب سے متاثرہ علاقوں میں چنائی کے وقت اس بات کا دھیان رکھیں کہ ٹینڈوں سے کیاس کواچھی طرح نکال لیا گیا ہے

۵۔ چنائی کے بعد بھٹی کوایک دود ھوپ ضرور لگوا عمیں تاکہ نمی کو مناشب سطیر لا یاجا سکے۔

### سبزيات

ا۔ سیاب سے متاثرہ علاقوں میں زراعت کی بہالی کے لیے ضرورت اس امرکی ہے کہ ان علاقوں میں جلداز جلد کچن گارڈینگ کو فروغ دیاجائے۔ یعنی گھریلو بیانے پر سبزیوں کی کاشت کی جائے اس مقصد کے لیے گھروں میں گلوں میں یا چھوٹی کیاریاں بناکراپنے گھرکی ضرورت کی سبزیاں پیدا کی جاسکتی ہیں.

### **SBP UPDATES**

(Compiled By: Humma Nisar, OG-III, P&RD)

### **Monetary Policy Statement**

The Monetary Policy Committee (MPC) decided to maintain the policy rate at 15 percent. The recent floods have altered the macroeconomic outlook and a fuller assessment of their impact is underway. On one hand, inflation could be higher and more persistent due to the supply shock to food prices, and it is important to ensure that this additional impetus does not spillover into broader prices in the economy. On the other, growth prospects have weakened, which should reduce demand-side pressures and suppress underlying inflation. Core inflation continued to drift upwards in both rural and urban areas and the current account and trade deficits narrowed significantly. Looking ahead, the floods are likely to result in greater need for some agricultural imports such as cotton and a few perishable food items. At the same time, exports of rice and textiles are likely to be negatively affected. The MPC will continue to carefully monitor developments affecting medium-term prospects for inflation, financial stability and growth.

https://www.sbp.org.pk/press/2022/Pr-10-Oct-2022.pdf

State Bank of Pakistan Suspends Authorization of an Exchange Company of 'B' Category State Bank of Pakistan has suspended, with immediate effect, the authorization of an Exchange Company -B namely M/s Mega Currency Exchange Company -B (Pvt) Limited till further orders due to serious violations of State Bank's regulations and instructions. The Exchange Company -B Category, its head office and all branches have been debarred from undertaking any kind of business activity during the suspension period.

https://www.sbp.org.pk/press/2022/Pr-27-Oct-2022.pdf

### **Workers' Remittances in September 2022**

Workers' remittances recorded an inflow of US\$ 2.4 billion during September 2022. 2. In terms of growth, during September 2022, remittances decreased by 10.5 percent on m/m and by 12.3 percent on y/y basis. 3. With cumulative inflow of US\$ 7.7 billion during Jul-September FY23, the remittances decreased by 6.3 percent as compared to the same period last year. 4. Remittances inflow during September 2022 were mainly sourced from Saudi Arabia (\$616.6 million), United Arab Emirates (\$474.3 million), United Kingdom (\$307.8 million) and United States of America (\$268.1 million)

https://www.sbp.org.pk/press/2022/Pr-11-Oct-2022.pdf

### SBP stops operations of M/s. TAG Innovation Pvt. Ltd as EMI

State Bank of Pakistan (SBP) has revoked the inprinciple approval and pilot operations approval granted to M/s. TAG Innovation Pvt. Ltd. to operate as an Electronic Money Institution (EMI) with immediate effect as per the applicable laws. SBP has taken this decision to protect the interest of public at large after identifying violation of its regulatory requirements and other concerns during the pilot operations of the company. EMIs are entities that offer innovative, user-friendly and cost effective low value digital payment instruments like wallets, prepaid cards, and contactless payment instruments. M/s TAG has been advised to close all customers' wallets and remove their application from Google's Play Store and Apple's App Store and any other platform with immediate effect.

https://www.sbp.org.pk/press/2022/Pr-07-Oct-2022.pdf

### **MANAGEMENT TIPS**

(Compiled By: Humma Nisar, OG-III, P&RD)

In order to achieve great results, a manager should be constantly thinking about how he can motivate and inspire his team. Here are some ways a manager can steer his employees in the right direction and achieve the goals together.

#### 1. Share your vision and set clear goals

Make sure your employees are aware of your vision and what your ultimate goals are for the business. This encourages everyone to work together to achieve better results. As well as this, regularly set clear and measurable goals that are framed by this vision so that you and your teams can track progress and they are able to see their success in a tangible way.

#### 2. Communicate with your staff

Part of clear goal-setting relies on effective communication with your team. Communication is a two-way street and you should make sure that there is a constant flow of communication between you and your employees. This way you can not only keep them up-to-date with what needs to be done but you can also listen to their ideas, opinions, and feedback.

### 3. Encourage teamwork

The best kinds of companies are those where everyone works together cohesively. Encouraging and promoting teamwork boosts productivity because it makes employees feel less isolated and helps them to feel more engaged with their tasks. You can do this by regularly holding team-building activities and opportunities for your team members to bond and get to know one another.

### 4. A healthy office environment

Our environment has a significant impact on our productivity, contentment, and creativity. Create a space that is enjoyable to work in and an office where your employees want to spend their time. Be conscious of privacy, noise, air quality, natural light, areas to relax, and the ambiance. Office perks such as these will also make your team feel appreciated and further encourage them to do their best work.

### 5. Give positive feedback and reward your team

The power of positive feedback is sometimes overlooked but recognizing and applauding achievement inspires team members. When employees achieve results, put in extra effort, or do outstanding work make sure to tell them that you're grateful and be specific in your praise. Reward your team for hard work, whether this is in the form of monetary rewards, gifts, perks, or more responsibility and independence.

### 6. Provide opportunities for development

To motivate and inspire your team to achieve great results you should provide your employees with opportunities for growth and development. These opportunities should be tailored specifically to suit the individual employee and can be in the form of further training, setting challenging targets, inviting an employee to shadow you, or spending your own time teaching and mentoring somebody.

### 7. Give employees the space they need to thrive

By giving your employees space and autonomy, you clearly show that you trust them the get the work done in their own way. This can inspire individuals to find more efficient or streamlined ways of completing tasks or to discover gaps in their skillset or the department as they work. Motivation is an essential part of any workplace and you should be constantly striving to make your employees feel motivated and inspired.

https://www.betterup.com/

### **NATIONAL NEWS**

(Compiled By: Humma Nisar, OG-III, P&RD)

# Certified seed availability: Track-and-trace system on the cards

The government is introducing a digitised trackand-trace system right from seed companies to the growers to ensure the availability of certified seeds in the market under the Kissan Package announced. The government, to rehabilitate the agriculture sector and to ensure food security in the country, has decided that free of cost distribution of 1.2 million bags of certified wheat seeds amongst farmers in flood-affected areas, which would cost Rs6.6 billion while to ensure the availability of certified seeds in the market, the government is introducing a digitised trackand-trace system right from seed companies to the growers.

## Punjab sets production target of wheat at 21MMT

The Punjab province has set wheat cultivation target for the current season at 16.5 million acres of land with the production target at 21 million metric tons. The provincial government has fixed the wheat support price at Rs3000 per 40kg before sowing to enable cultivation of wheat on more land and farmers can also get reasonable compensation for their labor. The wheat cultivation campaign has been started to extend technical guidance to the wheat farmers by reaching their doorsteps so that the farmers can grow more by cultivating wheat on a larger area. Moreover, a subsidy of Rs1200 per bag on the seeds of approved varieties of wheat and exhibition plots, seminars and use of print and electronic media to introduce modern production technology among the farmers is being used effectively.

#### Big farmer relief package announced

Rs.600 billion relief package for the farmers has been announced as only agriculture can

transform the country's economy in the shortest possible time and help reduce food imports. Under the package, loans worth of Rs1800 billion would be provided to farmers, which would be Rs400 billion more compared to what was disbursed to the farmers last fiscal year.

The mark-up of small farmers loans in flood affected is being waived off for which the government has to bear Rs10.6 billion cost, and for the first time in rural areas, the government has also decided to provide Rs50 billion loans to those youth which would be seeking employment in agriculture sector. This would cost Rs6.40 billion on account of markup to the government. The government has been able to get reduction of Rs2500 in DAP price after negotiation with the industry and now DAP would be available at Rs11250 to the farmers instead of Rs14000 per bag. 1.2 million bags of certified seeds would be provided to the farmers with equal cost sharing. Rs5 billion has been allocated for mark up on loans for landless Haris.

### Increase in Storage facilities for agri commodities

State Bank of Pakistan (SBP) has been recommended to encourage and incentivise banks to increase lending for storage facilities of agricultural commodities. There is a huge gap between the public sector's storage capacity and the actual needs. To overcome the financing problems faced by the private sector to develop storage facilities, the SBP should encourage and incentivise banks to increase lending for such facilities. These incentives will not only increase domestic agricultural production but will help develop ancillary industries and will enable country to export agricultural commodities and earn foreign exchange. Furthermore, development of grain storage can also help the country mitigate the adverse effects of floods and droughts.

Source: Business Recorder

### **ZTBL NEWS**

(Compiled By: Aamna Imtiaz, OG-II, P&RD)

INAUGURATION CEREMONY OF OLIVE OIL EXTRACTION UNIT HELD ON 24TH OCTOBER, 2022 AT ZTBL FARM



An Olive Oil Extraction Machine has been installed at ZTBL farm for demonstration and education of farming community. The inauguration ceremony of Olive Oil Extraction machine was held on 24<sup>th</sup> October, 2022 at ZTBL Farm under the leadership of Mr. Asad Ullah Habib, SEVP/Group Head (R&SAMD and P,R&TD). Mr. Muhammad Shahbaz Jameel, President ZTBL graced the event with his kind presence.



Mr. Qasim Mehmood Chishty, SEVP / Group Head (Operations Division and LM&MD), Aamir Zaffar Chaudry, EVP/ Group Head (ISD, Digital Banking Division, Services Division) and other executives of the Bank attended the event.





The olive oil extraction machine is having a capacity of processing 10 kg of fruit in one hour. NARC and Barani Agri Research Institute will divert any farmer from the surrounding areas to Extract Oil at ZTBL Farm.

### ZTBL ZARAI BAITHAK ARRANGED BY KOTRI BRANCH OF HYDERABAD ZONE

A Zarai Baithak was held on 24th October, 2022 by Kotri Branch of Hyderabad Zone in the Cultural Centre at Kotri. The Zarai Baithak was attended by more than 100 persons from different villages of Kotri, Hyderabad & Jamshoro vicinity. Every walk of community & stakeholders attended the session.



Display Stalls were installed ZTBL and M/S Union Seeds Tango Jam to promote Seed Products (Seed Company) having Head Office at Tando Jam & distribution network almost in every city to Sell under PSQCR standards.

Mr. Sarfaraz Ahmed, Zonal Chief, ZTBL Hyderabad Zone warmly welcomed all guests. He briefed the participants on product and services being offered by ZTBL and reschedulement of Loans by the Bank in flood affected areas. The Director of Union Seed Tango Jam briefed the audience regarding company's services. He highlighted the importance of usage of pesticides, agriculture education and use of technology, soil identification and testing, effect of weather on soil and crops and appropriate use of fertilizer.



Besides ZTBL representation, following honorable speakers addressed the session:

- Mr. Ghulam Ali Shah-Deputy Director (SBP/BSC) State Bank of Pakistan Hyderabad addressed the session & presented role of SBP as regulator, different lending schemes, agri credit lending schemes & CLIS, LIS, Kamyab Jawan, Women Enterprises Schemes & SBP Facilitation towards agriculture uplifting solutions.
- 2. Dr. Bhawan Mal, a progressive agriculturalist shared his experience regarding usage of latest technology for high per acre yield and appreciated the efforts of ZTBL to provide timely credit facility to the farming community especially to the small farmers.

Regional General Manager, Sindh-I Mr. Nizam Shaikh, thanked all the guest and participants and briefly described the role of ZTBL in providing credit facility and services to the farming community, especially small farmers and encouraged the farming community to avail the easy and swift loan facility from ZTBL. Following Suggestions were given by guests and farmers:

- ✓ The small DAMs may be constructed to meet the shortage of irrigation where thousands of acres barren land is available.
- ✓ Revenue Record may be computerized and e-credit scheme may be started again.
- ✓ Allotment of barren land to the small landless farmers

# ZTBL ZARAI BAITHAK ARRANGED BY BAFFA BRANCH OF ABBOTTABAD ZONE

#### **FARMERS/ATTENDEES AND NOTABLES**

- ✓ Around 75 Farmers/locals
- ✓ Mr. Saleem Khan, Kissan Councellor Baffa
- ✓ Mr. Nawaz Khan, Counselor Baffa
- ✓ Mr. Abdul Shakoor Khan, Progressive Farmer
- ✓ Mr. Arshad Iqbal, Agriculture Research Centre Baffa

Mr. Muhammad Ali, Manager NBP Baffa



#### **Highlights of the Event**

Mr. Nazar Hussain, BM, welcomed the participants. He highlighted the initiative of ZTBL to Promote Agri via Traditional practice like Baithak for participation and involvement of local community.

He further briefed the participants on objectives of ZTBL Zarai Baithak, Lending Schemes of the Bank, Liability & Digital Banking Services provided by the Bank, Resolution of issues, Awareness and advancement of new technology, ATM Card and its usage across all ATMs in Pakistan, Need of SIM on the name of customer while account opening and loan processing and 3% rebate on timely repayment of Bank's Dues.



#### Suggestion given by the Farmers/Participants

- Mr. Abdul Shakoor Khan and Mr Adnan Khan, progressive farmers of the area, appreciated the role & efforts of ZTBL in uplifting the farming community of the area.
- Mr. Nawaz Khan, Counselor Baffa kulharay suggested decreasing the rate of Markup to maximum 8%.