

AGRI. BUSINESS SUPPLEMENT

Zarai Taraqati Bank Limited



Editorial Board

MR. TARIQ MAHMOOD (P, R & T DIVISION)

Mr. Nadeem Akhtar Malik, Head (P&RD)

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

Mr. Ahmed Hussain Khan, Head (I&SU)

Ms. Iqra Mazhar, OG-II (P&RD)

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

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

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



TABLE OF CONTENTS

PEST SCOUTING AND PEST SURVEY AND ITS IMPORTANCE	03
PRE HARVEST LOSSES OF WHEAT CROP	05
ZARAI SIFARISHAT BARAY-E-KISSAN	08
SBP UPDATES	09
MANAGEMENT TIPS	10
NATIONAL NEWS	11
ZTBL NEWS	12

PEST SCOUTING AND PEST SURVEY AND ITS IMPORTANCE

MR. FAHEEM HAIDER

(GREEN BANKING UNIT, ATD)

Pest scouting, also known as pest monitoring or pest surveillance, is a systematic approach used in agriculture



and pest management to detect, identify, and assess the presence and abundance of pests in a particular area. The primary goal of pest scouting is to make informed decisions about pest control strategies, with the aim of minimizing the economic and environmental impact of pests on crops and plants.

Key steps involved in pest scouting include:

Field Inspection: Trained scouts or farmers regularly inspect the crops or plants to observe and document any signs of pests, diseases, or other potential issues.

Identification: When pests or signs of damage are found, the scouts identify the specific pest species responsible for the problem. Proper identification is crucial to choose the most appropriate control measures.

Monitoring Techniques: Various monitoring techniques may be used, such as visual observations, pheromone traps, sticky traps, pitfall traps, sweep nets, and digital technologies (e.g., drones and remote sensing) to assess pest populations accurately.

Sampling: Scouts may take random samples from different parts of the field to get a representative understanding of the pest population.

Thresholds: Pest scouting involves establishing economic or action thresholds, which indicate when pest populations have reached a level where intervention is necessary to prevent significant damage or economic losses.

Data Recording: Information collected during scouting, such as pest species, population levels, location, and crop growth stage, is recorded systematically for analysis and future reference.

Decision Making: Based on the information gathered from pest scouting, farmers and agricultural experts can decide on appropriate pest control strategies. These strategies can include biological control, cultural practices, mechanical methods, and judicious use of pesticides when necessary.

Pest scouting is an essential component of Integrated Pest Management (IPM), a sustainable and environmentally friendly approach to pest control. By implementing pest scouting as part of IPM, farmers can optimize their use of resources and reduce the risk of pesticide resistance while maintaining crop productivity and quality.

Pest Survey

A pest survey is a comprehensive and systematic examination of a specific area, such as a field, plantation, forest,



or urban area, to assess the presence, distribution, abundance, and potential impact of pests. The purpose of a pest survey is to gather valuable data on pest populations, identify pest species accurately, and evaluate the extent of pest damage or threat to the ecosystem or agricultural production.

Key objectives of a pest survey include:

Early Detection: Identifying pests early on is crucial to prevent their establishment and spread to new areas. Early detection allows for prompt action to mitigate potential economic and ecological impacts.

Species Identification: Accurate identification of pest species is essential for implementing effective control strategies and developing appropriate management plans.

Assessment of Pest Population: Pest surveys help in estimating pest population levels and understanding the population dynamics, which is essential for making informed decisions about control measures.

Distribution Mapping: Survey data is used to create distribution maps of pests, showing where

they are present and the areas they may be spreading to. This helps in targeted monitoring and management efforts.

Monitoring Changes Over Time: Regular pest surveys enable the monitoring of changes in pest populations over time, helping to track trends and make adjustments to management practices accordingly.

Development of Pest Risk Assessments: Survey data can be used to evaluate the potential risk posed by certain pests to specific crops, ecosystems, or regions, guiding risk management strategies.

Compliance and Regulation: Pest surveys may be conducted to assess compliance with quarantine regulations and to establish or maintain pest-free or pest-reduced areas. Depending on the scale and purpose of the survey, various survey methods and techniques may be employed, including visual observations, trapping, monitoring with pheromones, use of remote sensing technologies, and data analysis to draw meaningful conclusions.

Care during Pest Scouting:

- Consistently visit the fields on a weekly basis to conduct pest scouting activities.
- Optimal times for pest scouting are during the morning and evening when pests are most active and visible.
- It is recommended to allocate an area of approximately one acre or more for pest scouting. For larger fields, such as five

acres, at least one acre should be designated for scouting, while for fields covering 25 acres, a scouting area of five acres should be considered.

PRE HARVEST LOSSES OF WHEAT CROP AND THEIR CONTROL MEASURES

Mr. Ahmad Hussain Khan

(OG-II, Planning & Research Department)

Wheat is adapted to temperate regions, receiving annual rainfall of about 500-1200 mm. Higher precipitation causes lodging and diseases and interferes with field operations of planting and harvesting, so the yield is reduced. Wheat sowing after 20th November can cause reduction in yield up to 15-20 Kg per acre during each subsequent day. There are two critical phases, during which water stress reduces yield greatly;

- 1) Tillering stage (the development of adventitious roots to the start of tillering)
- 2) Seed formation stage (the period from anthesis to the milk stage).

According to an estimate the presence of weeds in wheat fields can reduce yield up to 14-42%. Thus, if 40 mounds of grains per acre are expected, it will reduce up to 23 mounds only. Seed rate for early, medium and late sowing varieties, should be 50, 60 & 70 kg/acre and any change in the seed rate causes substantial yield losses. Nitrogen and

phosphorus fertilizers using ratio should be 1.5:1. Crops sown after rice and sugarcane through tube well irrigated or sandy areas should be supplied with one bag of potash per acre, otherwise yield will adversely be affected.

Attack of Insects



Wheat crop is damaged by a large number of insects such as grasshoppers, crickets, aphids, army worms, while standing in the field. Grasshoppers and white ants attack plants during the seedling stage, they are more serious in rained areas. Aphids and army worms attack the crop in spring after heading, causing a considerable loss while the crop is still standing in the field. These pests also eat away the ears, including awns, immature grains, and tillers, tender leaves in the central whorl of the plant and even the older leaves. Rodents cause little damage to the seedling and most of the damage is caused at the ripening stage. Early and late wheat crop is more liable to damage by birds. They eat the seeds before emergence or soon after emergence at planting season. Birds also damage the crop after the dough stage by eating the grain directly from the spikes and by causing some years to shatter completely.

Attack of Birds

The House Sparrow is thought to be one of the serious pests of wheat crop in Pakistan. During certain seasons of the year it forages in the cropland in large numbers. Such foraging flocks damage the standing crops to a great extent. As such the House Sparrow has come into a potential or direct competition with man. The sparrow damage is thought to be one of the factors that severely constrain the efforts for achieving self-sufficiency in food production. The sparrow problem in Pakistan is complex and wide-spread, varying in size and magnitude from area to area depending on the variety of wheat grown, the date of ripening of the crops, and geographic location of a given area. Generally, the early grown crop is more vulnerable to the house sparrows, especially in those areas which fall on the routes of the migratory forms of sparrows.

Diseases Attacks

Wheat is also attacked by a number of pathogens/diseases that cause great losses to the quantity and quality of the produce. Rusts, smuts, powdery mildew and septoria are important diseases that reduce the yield of wheat in different parts of Pakistan. Powdery mildew sometimes attacks wheat in mountainous and sub-mountainous regions. Nematodes also infest wheat, in case of severe infestation, the seedlings may fail to come out of the soil, even if they grow, the infested plants remain stunted and give a shriveled unhealthy appearance. A variable

number of grains in an infested earhead may produce galls, which are shorter and thicker than the healthy ones. Although, they cause little mechanical injury to the plant root, yet their presence stimulates the formation of branched rootlets. The main root remains shorter or bunched, bearing small galls

Control measures

In areas, where termites or weevils impose economic problems, the crop should be sown after mixing granular insecticides with soil. If the attack of insects persists, the insecticides can be dusted on the crop. In certain fields, where heavy doses of N and P are applied year after year, symptoms of zinc deficiency may be noted. These symptoms appear on leaves as small white irregular patches. Rodents and birds damage can be reduced to greater extent by the presence of alternative crops, lack of shelter, scaring devices and poison baits. To avoid damage from diseases, resistant varieties of wheat should be grown, seed treatment can also be effective. Nematodes can be controlled by a suitable crop rotation. Gall nematodes can be controlled by separating the galls from the wheat seed by floating them on water in a tub.

1. Biological control

Lepidopterous pests of wheat can be controlled through natural enemies. Predaceous mites and parasites can control the stored wheat pests e.g. *Trichogramma*, can control the Angoumois grain moth successfully. In Nuclear Institute of

Agriculture (NIA), Tandojam, a biocontrol laboratory is rearing this parasite, but no regular experimentation has been carried out due to lack of manpower and facilities. Certain predatory mites, Ichneumonids, braconid, chalcid, protozoans and microbes act as predators and parasites of stored grain pests.

2. Resistant varieties

Research observations have shown that some varieties of different agricultural crops have grain resistant to insect pest attack. Such stock of resistant cultivars may be used to raise the varieties, highly resistant to the stored grain pest infestation.

3. Timely weed control

Weeds cause great losses in crops especially cereal grains. In wheat some broad and narrow leaved species of weeds, such as Jhil, Sinjh, Naro, Kanderi, Kadero, Dhank, Jhangli Jai, Drubh, Kabah, Chabber etc. are found, which create serious problem of competition with crop in food nutrients, water, sunlight, air and space; make crop weak and poor in growth and also cause decrease in yield. In fact, farmers give little or no attention to the weeds, which are considered as crop pests and cause yield losses in wheat. Therefore, weeds must be uprooted and controlled before first irrigation and/or after first watering to the crop. The effective methods are cultural and chemical control. The cultural method is laborious and time consuming one. Whereas, chemical method is easy, cheap and less time

consuming. However, yield may be increased from 15 to 25 per cent by the control of weeds

4. Proper irrigation scheduling:

The optimum water quantity must be applied to wheat for reducing water losses. The excess water may cause lodging problem in wheat. However, wheat crop needs 5 to 6 irrigations from sowing to maturity periods. First irrigation should be given after 21 days of sowing and it must not be delayed beyond 21 days, which may cause poor root development. Whereas, subsequent irrigations should be given according to three weeks interval or critical growth stages such as crown root initiation, tillering, flowering and anthesis, grain filling, Milky and grain maturity or dough stages etc. These critical stages need special attention for yield increase with the timely supply of irrigation water needed in proper growth, development and maturity of the crop. The drought condition during different growth stages may decrease tiller number, which can survive to produce grains and may also decrease number of seeds and seed weight per ear that contributes to low yields.

5. Quarantine

Some dangerous pests enter in the country along with seed and food grain imported from other countries. So, quarantine measures towards preventing the import of foreign pests should be very strict. The material to be imported should be subjected to laboratory test to detect any kind of pests at the point of entry.

زرعی سفارشات برائے کسان

ملک بھر میں جولائی کے مہینے میں مون سون کی بارشوں کا آغاز ہوجاتا ہے اور درجہ حرارت 35 سے 40 ڈگری سینٹی گریڈ کے درمیان رہتا ہے۔ تاہم ہوا میں نمی کا تناسب 50 سے 60 فیصد تک بڑھ جاتا ہے۔ جو کہ فصلات کی بڑھوتری پر اثر انداز ہوتا ہے۔ لہذا مون سون کے موسم میں فصلات میں پانی کے نکاس کو یقینی بنائیں اور فصلات میں آبپاشی محکمہ موسمیات کی پیشن گوئی کو مد نظر رکھ کر کریں۔

موسمی مکئی

- ☆ مکئی کاشت کے لیے بھاری میرا زرخیز زمین بہت موزوں ہے۔
- ☆ بارانی علاقوں میں مکئی مون سون شروع ہونے سے پہلے کاشت کریں تاکہ پودے جڑوں کا نظام اچھی طرح قائم کر لیں اور مون سون کی بارشوں کا صحیح فائدہ اٹھاسکیں۔
- ☆ محکمہ زراعت کی منظور شدہ عام اقسام ملکہ 12016 اگیتی 2002 ایم ایم آئی پی اور پرل جبکہ دوغلی اقسام ایف ایچ 1046 ایف ایچ 949 اور وائی ایچ 1898 کاشت کریں۔ یہ اقسام پنجاب سید کارپوریشن اور لوکل سیڈ ڈیلر سے دستیاب ہوں گی۔
- ☆ بارانی علاقوں میں مکئی کی کاشت سنگل روکاشن ڈرل/ پلانٹر سے آڑھائی فٹ کے فاصلے پر کریں۔ قطاروں کا درمیانی فاصلہ دو سے اڑھائی فٹ رکھیں۔
- ☆ موسمی مکئی کی دوغلی اقسام کے لیے پودوں کی تعداد 29 ہزار سے 30 ہزار فی ایکڑ جبکہ عام اقسام کے لیے پودوں کی تعداد 25 سے 26 ہزار فی ایکڑ رکھیں۔

مونگ اور ماش

- ☆ مونگ کی کاشت کے لیے بہتر نکاسی والی میرا زمین موزوں ہے۔ جبکہ کلر رائی اور سیم زدہ زمین غیر موزوں ہے۔
- ☆ بارانی علاقوں کے کاشتکار مونگ اور ماش کی کاشت مون سون کی پہلی بارش کے بعد تر آنے پر کریں۔ ان دونوں فصلوں کی کاشت جولائی کے آخر تک کی جاسکتی ہے۔
- ☆ مطوبہ پودوں کی تعداد حاصل کرنے کے لیے نی 8 سے 10 کلوگرام بیج کاشت بذریعہ جھو اور ڈرل سے کاشت کے لیے 12 سے 15 کلوگرام بیج فی ایکڑ استعمال کریں۔ اور جب پودے 8 سے 10 دن کے ہوں جائیں تو چھدرائی مکمل کر کے زائد اور کمزور پودے نکال دیں۔
- ☆ آبپاش علاقوں میں منظور شدہ اقسام نیاب مونگ 2011، ازری مونگ 2006 اور چکوال ایم 6 کاشت کریں، جبکہ بارانی علاقوں میں نیاب مونگ 2011 ازری مونگ 2006، نیاب مونگ 2016 اور بہاول پور 2017 جبکہ ماش کی کاشت کے لیے ماش 97، چکوال ماش اور عروج 2011 موزوں ترین اقسام ہیں
- ☆ اچھی پیداوار کے لیے بوقت کاشت ایک بوری ڈی اے پی اور آدھی بوری پونا شیم سلفیٹ استعمال کریں۔
- ☆ قطاروں درمیانی فاصلہ 30 سینٹی میٹر جبکہ بیج کی گہرائی 3 سے 5 سینٹی میٹر رکھیں اور پودوں کا درمیانی فاصلہ 8 سے 10 سینٹی میٹر رکھیں۔

تل

- ☆ تل کی کاشت کے لیے پانی جذب کرنے والی درمیانی اور بھاری میرا زمین کا انتخاب کریں تاہم یہ ہر قسم کی زمین میں بھی کاشت کی جاسکتی ہے۔
- ☆ شرح بیج ڈرل یا قطاروں میں کاشت کے لیے ڈیڑھ سے دو کلوگرام بیج فی ایکڑ رکھیں۔
- ☆ پنجاب میں عام کاشت کے لیے سفید تلوں کی منظور شدہ اقسام ٹی ایچ 6 ٹی ایس 5 ہیں جو بہتر پیداوار کی صلاحیت رکھتی ہیں۔ جبکہ ان میں سے ٹی ایچ 6 بہتر پیداوار کی حامل ہے۔
- ☆ اچھی پیداوار کے حصول کے لیے 15 جولائی تک کاشت مکمل کر لیں۔

SBP UPDATES

Monetary Policy Statement

The Monetary Policy Committee (MPC) decided to keep the policy rate unchanged at 22 percent. The Committee noted that the economic uncertainty has decreased since the last meeting, whereas near-term external sector challenges have been largely addressed and investor confidence has shown improvement. The MPC particularly noted that year-on-year (y/y) inflation is likely to remain on downward path over the next 12 months, which implies a significant level of positive real interest rate. The latest high-frequency indicators up to June 2023 continue to show weak economic activity, broadly in line with the provisional estimates of 0.3 percent real GDP growth in FY23; a sharp decline from around 6 percent growth in the previous two years. Looking ahead, barring unforeseen events, the MPC expects economic activity to moderately recover in FY24, supported by a rebound in rice and cotton output.

For more details, please visit:

<https://www.sbp.org.pk/press/2023/Pr-31-Jul-2023.pdf>

Workers' Remittances in June 2023

Workers' remittances recorded an inflow of US\$2.2 billion during June 2023. During June 2023, remittances increased by 3.9 percent on m/m basis. Cumulatively, at US\$ 27.0 billion, remittances decreased by 13.6 percent during FY23 as compared to FY22. Remittances inflows during June 2023 were mainly sourced from Saudi Arabia (\$515.1 million), United Kingdom (\$343.0

million), United Arab Emirates (\$324.7 million) and United States of America (\$272.3 million).

For more details, please visit:

<https://www.sbp.org.pk/press/2023/Pr-10-Jul-2023.pdf>

Governor SBP unveils Rs. 75 Denomination Banknote to mark 75 years of SBP's Founding

Governor State Bank of Pakistan (SBP) unveiled a Rs. 75 Commemorative Banknote to mark the 75 years of SBP's Founding in a ceremony held at the SBP Museum, Karachi. Deputy Governors, Executive Directors, Managing Directors of SBP subsidiaries, Chief Executive Officers/Presidents of commercial banks, officers of SBP and Mr. Sibtain Naqvi, grand-nephew of the renowned calligrapher Sadequain Naqvi, attended the event.

For More details, please visit:

<https://www.sbp.org.pk/press/2023/Pr-04-Jul-2023.pdf>

State Bank of Pakistan Designates Domestic Systemically Important Banks (D-SIBs)

The State Bank of Pakistan has announced the designation of D-SIBs for the year 2023 under the Framework for 'Domestic Systemically Important Banks (D-SIBs). In line with D-SIBs framework, State Bank has carried out the annual assessment based on banks' financials as of December 31, 2022. As per the assessment, three banks namely National Bank of Pakistan, Habib Bank Limited and United Bank Limited have been designated as D-SIBs for the year 2023. These banks will have to follow additional Common Equity Tier-1 (CET-1) capital requirements, in addition to implementing the enhanced supervisory requirements:

MANAGEMENT TIPS

1. Create a Distraction-Free Environment

In today's fast-paced, ultra-connected modern world, avoiding distractions is easier said than done. Between smartphones, computers, coworkers and other distractions, it's easy to lose significant amounts of time and to watch your productivity falter. With this in mind, make your work environment a distraction-free oasis. If possible, turn off your smartphone during business hours. Otherwise, mute it to avoid being interrupted constantly by notifications. Stay away from the Internet and social media. If you have a door, close it whenever you need to put your nose to the grindstone.

2. Schedule Important Daily Tasks

Like many bankers, you may find yourself putting off routine but important daily tasks in order to handle other things. Inevitably, these crucial tasks start piling up and put an even bigger damper on your productivity. Avoid this issue by determining the best time of day to handle various things and scheduling them accordingly. For example, if things tend to be quiet early in the day, set aside 30 minutes every morning to take care of paperwork. If clients tend to be available near the end of the day, set aside time in your schedule to make calls then.

3. Take Breaks

Counterintuitive though it may be, deliberately scheduling small breaks throughout the day is a

great way to effectively manage time. Everyone needs occasional breathers during the work day, and bankers are no exception. On your daily schedule, pencil in 10- or 15-minute break periods here and there, and make sure to take them. Spend them walking, doing exercises in your office or catching up with personal matters. You'll come away feeling refreshed and will be better able to manage your time appropriately.

4. Delegate Tasks Whenever Possible

High achievers often feel compelled to take care of everything themselves. Many bankers are high-achieving individuals, so this is a common issue in the industry. Taking on too many responsibilities is a surefire way to run out of time every day and to fall woefully behind. Whenever possible, delegate tasks to others in your office. You might not savor the idea of relinquishing control, but you will appreciate how much easier it is to take care of important tasks by letting others handle simpler ones.

5. Take a Methodical Approach to the Workday

As a busy banker, you're apt to try and tackle multiple tasks at a time. This approach often backfires, resulting in a lot of half-finished work—and, in many cases, lots of careless mistakes. Make a point of always focusing exclusively on the task at hand. When on a phone call, for example, don't browse emails or file paperwork. Before switching to a new task, make sure that you can mark the previous one as "complete."

Source: <https://www.bestfinanceschools.net/>

NATIONAL NEWS

ECNEC approves PC-1 of Rs377.236bn plan

The Executive Committee of the National Economic Council (ECNEC) has approved PC-1 of a three years' agriculture tubewells solarization programme at Rs377.236 billion. The Ministry of Planning and Development in a summary informed the ECNEC meeting presided over by Finance Minister Ishaq Dar that Prime Minister's National Programme for Solarization Agriculture tube wells project is sponsored by the Ministry of National Food Security and Research with the main objective to enhance agriculture productivity through clean and green energy by convening the existing 100,000 tube-wells (50,000 diesel and 50,000 electric power) into solar PV system in three years. The cost will be shared by the federal, and provincial governments and beneficiary farmers at a ratio of 33 per cent. It will help the farmers to reduce their cost of production by saving the cost of diesel electricity.

Punjab Agriculture Department to focus on corporate farming, horticulture, kitchen gardening

Punjab Minister for Agriculture, Industry and Commerce has instructed the provincial agriculture department to focus on promotion of corporate farming, horticulture and kitchen gardening at the grass-root level. Recognizing the potential of modern farming techniques, the Minister encouraged the promotion of such

practices that enhances per-acre production. The session also focused on the targets, working procedures, and organizational setups of the extension, research, and water management wings. The meeting participants were also briefed on the subsidies provided to farmers for agricultural products and forthcoming strategies. Additionally, detailed information about ongoing and future water management initiatives were reviewed.

Visit of Chinese delegation to NARC

A delegation, led by Wu Yuelang, Department of Science and Technology, Hubei Province, China visited the National Agricultural Research Centre (NARC) in Islamabad as part of their visit to Pakistan. Yuelang expressed a keen interest in sharing their research findings and fostering collaboration with PARC, aiming to gain insights from the experiences of Pakistani agricultural researchers. Furthermore, he emphasized that fostering collaboration in agricultural research would not only enhance scientific advancements but also reinforce the brotherly ties between the two nations. During their visit, the delegation had the opportunity to explore the research laboratories at the National Institute of Genomics and Agricultural Biotechnology (NIGAB) and the Plant Genetic Resources Institute (PGRI), where they expressed their admiration for the ongoing research activities.

Source: Business Recorder

ZTBL NEWS

MOU BETWEEN NUST & ZTBL

The National University of Sciences and Technology (NUST) and the Zarai Taraqati Bank Limited (ZTBL) have entered into a Memorandum of Understanding (MoU) to collaborate on promoting food security, environmental sustainability, and agricultural development in Pakistan. The MoU aims to enhance the livelihoods of the farming community through the adoption of modern agricultural technologies and practices.



The collaboration includes conducting seminars and workshops to disseminate the latest

agricultural developments, implementing joint projects and research activities, publishing research outcomes. The MoU also includes offering internship opportunities to NUST students, collaborating on the development of new credit products, sharing relevant information and data, and providing training and capacity building. Both organizations will participate in the events aimed towards agriculture development in the country. Regular meetings and progress reports will be conducted to ensure effective implementation of the collaboration.

LAUNCHING OF NEW PRODUCT NAMEDLY “ZTBL SHANDAAR MAHANA AMDANI ACCOUNT (ZSMAA)”

In line with the directives of worthy President, a new product titled ZTBL Shandaar Mahana Amdani Account (ZSMAA) has been launched by the Bank which covers individuals as well as entities from every segment/aspect of business with certain features which will assist Bank’s field functionaries to mobilize the deposit and help provide our customers with a convenient and hassle-free way to earn a monthly profit on their savings.

CONVERSION OF CONVENTIONAL BRANCHES INTO ISLAMIC BANKING BRANCHES BY ZTBL

During the month of July, 2023, following conventional branches of the bank have been converted into Islamic Banking Branches;

1. Dassu Branch, Abbottabad Zone
2. Lakki Marwat Branch, D.I Khan Zone
3. Astore Branch, Gilgit-Baltistan Zone
4. Bajur Khar Branch, Mingora Zone