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AGRI. BUSINESS SUPPLEMENT

Zarai Taraqiati Bank Limited

Editorial Board

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Technology for Agriculture

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The Role of Smart Irrigation in Combating Water Scarcity on Farms

Introduction

Water scarcity is a growing global issue, heavily impacting agriculture and food security. Agriculture, as the largest consumer of freshwater, is particularly vulnerable to reduced water resources, exacerbated by population growth, rising food demand, and climate change. To address this, innovative solutions like smart irrigation technologies are crucial. These systems use real-time data to deliver water based on crop needs, improving water efficiency compared to traditional methods. By optimizing resource use, smart irrigation offers a promising solution to mitigate water scarcity's impact on agriculture.

Defining Smart Irrigation

Smart irrigation optimizes water use by adjusting irrigation based on real-time environmental conditions and crop needs, unlike traditional systems that use fixed schedules and waste water. It relies on two main controllers: weather-based (Evapotranspiration or ET) and soil-based controllers. Weather-based controllers adjust irrigation using data like temperature, humidity, and rainfall, while soil-based controllers use sensors to monitor moisture and irrigate when levels drop below a threshold. This approach significantly reduces water waste, improves efficiency, and supports sustainable farming practices in the face of growing water scarcity.

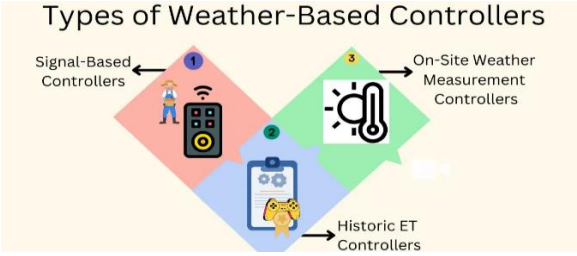

Figure 1 Drip Irrigation

The Growing Crisis of Water Scarcity in Agriculture

Water scarcity, worsened by rising demand, declining quality, and climate change, is a growing crisis, especially for agriculture, the largest consumer of freshwater. Over three billion people live in areas facing significant water shortages, with 1.2 billion under severe constraints. Freshwater availability per person has dropped by over 20% in the last 20 years. Climate change further reduces water for farming, highlighting the urgent need for efficient water management to ensure food security for vulnerable populations.

Figure 2 Water Scarcity

The Impact of Water Scarcity on Crop Production and Food Security

Water scarcity harms crop production and food security, reducing yields and quality, especially for staples like rice, wheat, and corn. Droughts worsen pest outbreaks and disrupt ecosystems, limiting crop diversity and availability. Developing countries face heightened risks of food shortages, price spikes, and hunger, underscoring the need for efficient water management.

How Smart Irrigation Systems Work to Combat Water Scarcity

Smart irrigation systems use sensors to monitor soil moisture, weather, and plant hydration, adjusting watering schedules based on real-time data. Advanced systems use AI to predict water needs and optimize strategies. IoT connectivity allows

remote control, while features like weather forecasting and leak detection minimize waste, ensuring efficient, sustainable irrigation.

Figure 3 Irrigation Scheduling

Water Usage Efficiency: Comparing Smart and Traditional Irrigation

Smart irrigation systems improve water efficiency by 30% to 50%, with some cases exceeding 70%, by delivering water precisely to plant root zones and reducing waste. Drip irrigation, a key technology, achieves 90-95% efficiency, much higher than traditional methods (60-85%). Case studies show benefits like a 40% reduction in water use and a 20% yield increase, demonstrating smart irrigation's potential to enhance sustainability and productivity.

Benefits of Smart Irrigation on Farms

Smart irrigation systems address water scarcity and promote sustainable agriculture by optimizing water use based on real-time data. They reduce consumption, minimize waste, and improve crop yields and quality, leading to cost savings in water, energy, and labor through automation. These systems maintain optimal soil moisture, supporting healthier crops, and reduce water runoff and fertilizer leaching, protecting ecosystems. Remote monitoring via mobile apps or web interfaces provides convenience, allowing farmers to manage irrigation anytime, anywhere, enhancing efficiency and sustainability.

Key Smart Irrigation Technologies for Water Conservation

Key smart irrigation technologies enhance water conservation. Drip irrigation saves 60-80% of water by targeting plant roots. Micro-sprinklers reduce use by 20-50%, controlling spray and limiting evaporation. Subsurface Drip Irrigation (SDI) maximizes efficiency (up to 95%) by burying lines, reducing evaporation and weeds. Weather-based controllers optimize watering using weather data, while soil moisture sensors trigger irrigation only when needed. These technologies improve water savings, crop health, and sustainability.

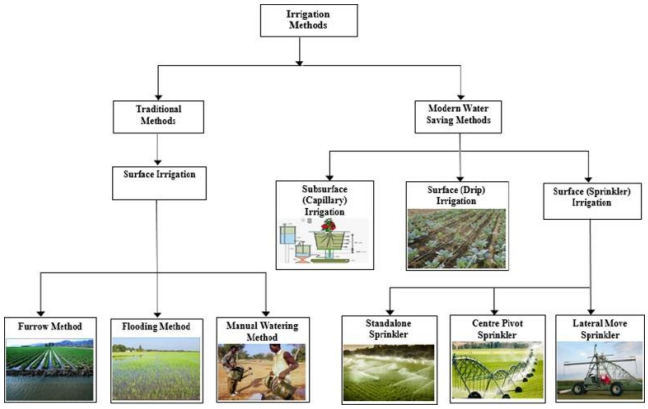

Figure 4 Traditional and Smart Irrigation techniques.

Challenges and Barriers to the Adoption of Smart Irrigation

Despite the benefits, barriers hinder smart irrigation adoption. High initial costs are a significant obstacle, especially for smallholder farmers. Infrastructure challenges, like unreliable internet and power, complicate implementation, as many systems depend on these for data collection and remote management. A lack of technical expertise and farmer education on system installation and troubleshooting limits adoption. Concerns about data privacy, compatibility with existing equipment, and potential technical issues like sensor malfunctions also deter farmers from using smart irrigation systems.

Conclusion

Smart irrigation systems help combat water scarcity in agriculture by reducing water use and improving crop yields. Future advancements like AI, machine learning, and remote sensing promise even greater efficiency. To realize their potential, challenges such as high costs, infrastructure gaps, and lack of technical expertise must be addressed. Governments and organizations must invest in supportive policies, infrastructure, and education to empower farmers. Adopting smart irrigation is crucial for sustainability, food security, and environmental protection amid growing water scarcity.

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Towards a Circular Bio-Economy in Pakistan: An Integrated Approach to Sustainable Resource Management

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Introduction

In the face of mounting environmental degradation, resource scarcity, and unsustainable production practices, the concept of a circular economy (CE) is increasingly recognized as a vital development pathway for countries like Pakistan. Traditionally characterized by a linear "take-make-dispose" economic model, Pakistan's economy has exacerbated ecological imbalances and resource depletion. Against this backdrop, recent scholarly contributions have underscored the urgent need to transition toward a circular economy that prioritizes reuse, recycling, and resource optimization, especially within the agriculture and bio-economy sectors. This article synthesizes findings from four significant academic studies that explore Pakistan's circular bio-economy potential, the role of artificial intelligence (AI) in CE transitions, behavioural and systemic challenges in pesticide waste management, and corporate barriers in food waste governance. Together, these studies offer a roadmap for integrating technology, behaviour change, and policy reforms for a sustainable, circular future.

Circular Bio-Economy in Pakistan

Ali et al. (2024) conducted a comprehensive assessment of Pakistan's biomass resources, revealing a largely untapped yet highly promising

bio-economy landscape. They employed mixed-method techniques, including regression analysis and the fuzzy Delphi method, to project significant increases in biomass availability. Their findings indicated that total crop residue production was expected to increase by 57% between 2018 and 2036, driven predominantly by wheat, maize, rice, sugarcane, and cotton cultivation. Concurrently, energy generation from buffalo waste was projected to rise to over 106 million MWh by 2036, representing a 34% increase from 2016 levels.

Despite producing over 20 million tons of agricultural waste and 25 million tons of agro-industrial waste annually, Pakistan's bioeconomy remained underdeveloped and informal. Ali et al. (2024) argued that deploying biomass conversion technologies such as pyrolysis, hydrolysis, and fermentation could transform these residues into biofuels, biochemicals, animal feed, and organic fertilizers. The study linked these interventions directly to the achievement of several Sustainable Development Goals (SDGs), notably SDG 2 (Zero Hunger), SDG 11 (Sustainable Cities and Communities), and SDG 12 (Responsible Consumption and Production). By doing so, the research positioned biomass valorisation as a strategic opportunity to alleviate rural energy poverty, reduce waste, and create green job opportunities.

Integrating AI into the Circular Economy Transition

Ali et al. (2024) extended this discourse by exploring how artificial intelligence (AI) could serve as a catalyst in facilitating circular economy (CE) transitions within Pakistan's agriculture and food industries. They proposed a conceptual framework that integrated AI applications—such as machine learning algorithms, drones, IoT sensors, and predictive analytics—with circular practices to enhance waste reduction and resource efficiency. The study identified several practical use cases for AI in promoting circularity, including smart recycling systems for managing agricultural waste, drones and IoT sensors for real-time crop monitoring to minimize pesticide overuse, and predictive analytics for optimizing food packaging, storage, and logistics.

However, the research noted that AI adoption in Pakistan's agriculture sector faced persistent challenges, such as inadequate digital infrastructure, a scarcity of skilled professionals, and limited policy and regulatory support. To overcome these barriers, Ali et al. (2024) recommended the development of a multi-stakeholder roadmap involving government agencies, industry representatives, academic researchers, and civil society actors. They argued that such coordinated action could position AI as an enabler of a digital, data-driven circular economy within Pakistan's agricultural systems.

Behavioural and Systemic Barriers to Pesticide Waste Management

While resources and technology provide essential tools for circular transitions, behavioural patterns and systemic inefficiencies often determine actual outcomes. Addressing this aspect, Raza et al. (2023) investigated farmers' pesticide container waste (p-waste) disposal practices, a largely overlooked but environmentally significant issue in Pakistan's agricultural landscape. Based on a field survey of 210 farmers in Faisalabad, the study applied Partial Least Squares Structural Equation Modelling (PLS-SEM) to analyse the psychological and social factors influencing recycling behaviour.

The findings indicated that perceived behavioural control and recycling intention were the most significant predictors of p-waste management practices, followed by attitudes, subjective norms, and environmental concerns. Notably, only 19% of

farmers reported having received formal training in the safe use and disposal of pesticides, with improper disposal, often in fields and water bodies, remaining the norm. Raza et al. (2023) recommended enhancing farmer education programs, expanding waste collection infrastructure, and enforcing stricter regulatory oversight to mitigate the environmental and health hazards associated with pesticide container mismanagement.

Corporate and Systemic Barriers in Food Waste Management

At a broader systemic level, Ali et al. (2021) pioneered an analysis of corporate and institutional barriers hindering circular economy (CE) adoption within Pakistan's food industry. Employing a Fuzzy Multi-Criteria Decision-Making (MCDM) approach, the study evaluated fifteen key political, technical, and cultural obstacles. Chief among these was the inherent complexity of circular models, which businesses perceived as labour-intensive, financially burdensome, and operationally disruptive compared to conventional linear practices.

Additionally, the prevalence of misleading and non-standardized food shelf-life labels was identified as a significant barrier, leading to premature disposal of edible food products. Other obstacles included the poor economic viability of circular startups, corporate reluctance to invest in non-revenue-generating waste recovery ventures, and the technological backwardness of rural food producers. Deeply entrenched cultural consumption habits that resisted reuse, and recycling further compounded these challenges.

To address these systemic gaps, Ali et al. (2021) proposed targeted government incentives for CE integration in corporate policies, infrastructure investments in waste sorting and valorisation technologies, awareness campaigns aimed at altering consumer behaviour, and public–private collaborations to establish scalable CE initiatives.

Authors' Perspective

As researchers affiliated with the Sustainable Development Policy Institute (SDPI), we find that these studies collectively highlight both the opportunities and persistent barriers confronting Pakistan's shift to a circular bioeconomy. While the country possesses abundant biomass resources and shows promising prospects for AI integration in agriculture, systemic inefficiencies, cultural inertia, and behavioural inconsistencies continue to hinder progress. In our view, the solution lies in moving beyond isolated technical interventions toward a fully integrated, multi-sectoral strategy that embeds behavioural insights into national policy frameworks, incentivizes private sector innovation, and cultivates a digitally competent agricultural workforce.

Furthermore, the human dimensions of circularity, farmer training, consumer awareness, and corporate mindset shifts, must receive equal emphasis alongside technological and infrastructural solutions. Pakistan now stands at a critical crossroads where strategic investments in bio-economy technologies and AI-enabled agriculture can unlock significant environmental, economic, and public health benefits. The imperative is not solely technical, but deeply societal, requiring a paradigm shift in how institutions, communities, and markets perceive and manage resources.

Conclusion

The collective findings from these studies highlight that Pakistan's transition toward a sustainable and circular agriculture and bioeconomy requires a holistic approach that integrates technological

innovation, behavioural change, and policy reform. Technological tools such as artificial intelligence, IoT, drones, and biomass conversion technologies hold significant promise for enhancing resource efficiency, waste reduction, and productivity. However, their successful adoption depends on customizing solutions to local conditions and strengthening digital infrastructure. Equally important is addressing the behavioural and social dimensions by scaling up education, training, and awareness initiatives to empower farmers, waste workers, industry professionals, and consumers to adopt circular practices confidently and effectively. In addition to technology and behavioural change, structural reforms and coordinated policy actions are critical to creating an enabling environment for circular economy (CE) adoption. Aligning CE strategies with national energy, agriculture, and climate policies will ensure consistency and stronger institutional support.

Targeted government incentives, investments in waste management infrastructure, and clear regulatory frameworks are needed to overcome current barriers faced by businesses and rural producers. Moreover, fostering strong public–private partnerships and research-industry collaborations will accelerate innovation, resource sharing, and the scaling of CE models. Ultimately, only through such a multi-faceted and collaborative approach can Pakistan fully realize the benefits of circularity, contributing to environmental sustainability, rural development, and broader Sustainable Development Goals.

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بیج

☆ کٹی ہوئی فصل کو دھوپ میں خشک کرنے کے بعد بیج کی گہائی والی تھریشر کے ساتھ گہائی کریں۔

☆ بیج کو خشک اور صاف کر کے سٹور میں رکھیں یا فروخت کریں۔ اس میں نمی کی مقدار 10-8 فیصد سے زیادہ نہیں ہونی چاہیے۔

بہاریہ مکئی

☆ موسمی حالات دیکھتے ہوئے فصل کو حسب ضرورت مناسب وقفے سے آبپاشی کریں۔ بوائی کے وقت کسی صورت میں پانی کی کمی نہ آنے دیں۔ بوائی کے بعد کیت کو ہمیشہ تر و تر حالت میں رکھیں تاکہ دانہ بننے میں مدد ملے لیکن پانی کھڑا نہیں ہونا چاہیے۔

☆ گوڈی کریں آخری گوڈی کرتے وقت پودوں کے ساتھ مٹی چڑھا دیں۔

☆ ہائبرڈ اقسام کو درمیانی زمین میں پانچ تا چھ پتے نکلنے پر، آٹھ تا دس پتے نکلنے پر اور پھول آنے سے تقریباً 15 دن قبل ایک ایک بوری یوریا کھاد فی ایکڑ ڈالیں۔

☆ مکئی کے گڑوویں اور کونپل کی مکھی کے تدارک کے لیے مناسب دانہ دار زہروں کا استعمال محکمہ توسیع زراعت کے مقامی عملہ کے مشورہ سے کریں۔

مونگ پھلی

☆ مونگ پھلی کی کاشت کے لیے زمین کی تیاری کریں۔ مونگ پھلی کی کاشت کے لیے ریتلی، ریتلی میرا یا ہلکی میرا زمین موزوں ہے۔

☆ زمین کی تیاری کے وقت گہرا ہل چلائیں تاکہ اوپر والی مٹی مکمل طور پر نیچے چلی جائے اور جڑی بوٹیاں بھی تلف ہو جائیں۔ بارانی علاقوں میں مونگ پھلی کی کاشت محفوظ کیے ہوئے وتر میں وسط مارچ تا آخر مئی میں کرنی چاہیے۔ البتہ تھل کے آبپاش علاقوں میں مونگ پھلی کی کاشت 15 اپریل تا 31 مئی تک کرنی چاہیے۔

☆ اچھی پیداوار کے لیے معیاری بیج کا استعمال کریں۔ اٹک 2019، پوٹھوہار اور این اے آر سی 2019 کے لیے موزوں وقت کاشت 15 مارچ تا 30 اپریل جبکہ باری 2011 بفر چکوال گولڈ، فدا اور فقر اٹک کے لیے 15 مارچ تا 31 مئی ہے۔

☆ بیج کی شرح این اے آر سی 2019 کے لیے 35 اور فقر چکوال کے لیے 50 کلوگرام گریاں فی ایکڑ جبکہ باقی اقسام کے لیے 40 کلوگرام گریاں فی ایکڑ رکھیں۔

☆ بوائی کرتے وقت قطاروں کا درمیانی فاصلہ 1.5 فٹ اور پودوں کا درمیانی فاصلہ 6 تا 8 انچ رکھیں۔

☆ جڑی بوٹیوں کے کیمیائی انسداد کے لیے اگاؤ سے پہلے اور اگاؤ کے بعد استعمال ہونے والی جڑی بوٹی مار زہریں محکمہ توسیع زراعت کے عملہ کے مشورہ سے کریں۔

سبزیات

☆ سبزیات کی گوڈی کریں۔ جہاں ضرورت ہو پودوں کے ساتھ مٹی چڑھائیں۔ موسمی حالات کو مدنظر رکھتے ہوئے 8 تا 10 دن کے وقفہ سے آبپاشی کریں۔

☆ کیڑے اور بیماریوں کے حملے کی صورت میں محکمہ زراعت کے عملہ سے مشورہ کر کے سپرے کریں۔

باغات

ترشاوہ پھل

☆ پودوں کے نچلے گلے اور غیر معمولی بڑھوتری والی شاخیں کاٹیں۔

☆ جن پودوں پر پھل بن چکا ہے وہاں نائیٹروجن کھاد فوری طور پر ڈالیں اور عناصر صغیرہ کا سپرے بھی کریں۔

☆ موسمی حالات اور زمینی ساخت و کیفیت کو مدنظر رکھتے ہوئے 15 دن کے وقفے سے آبپاشی کریں۔

☆ بارشوں کے دوران سٹرس کینکر پھیلنے کا خدشہ ہوتا ہے۔ اس لیے اس بیماری کو نرسری میں ہی کنٹرول کریں۔ نیز اس سے بچنے کے لیے لیف مائنر کے انسداد پر خصوصی توجہ دیں۔

آم

☆ جڑی بوٹیوں کا تدارک زہروں سے کریں۔ بوٹر کی کٹائی جاری رکھیں اور کٹائی کے بروز گمی جگہ پر بورڈو پیسٹ لگائیں۔

☆ نائیٹروجن کھاد (یوریا) بطور دوسری خوراک 1 کلوگرام فی پودا ڈالیں۔

☆ پھل کی مکھی کے خلاف جنسی پھندوں کا سپرے کریں۔

امرود

☆ نرسری کے لیے عمدہ اور پختہ پھل سے بیج حاصل کریں۔

☆ اگر یوریا کھاد مارچ میں نہ ڈالی گئی ہو تو اس ماہ ڈال دیں۔

☆ موسمی حالات کو مدنظر رکھتے ہوئے 12 سے 15 دن کے وقفے سے آبپاشی کریں۔

☆ پھل کی مکھی کے نقصان سے بچنے کے لیے پھل کی برداشت تک جنسی پھندے لگائیں۔

کھجور

☆ جب پھل تیار ہو جائے تو اس کی چھدرائی کریں۔ 50% پھل ہر شاخ سے اتار دیں۔

☆ بارشوں کے موسم یا زیادہ گرمی میں پتوں پر پھپھوندی کا حملہ ہونے کی صورت میں پھپھوندی کش زہر کا سپرے کریں۔

حوالہ از زراعت نامہ

SBP UPDATES

SBP's Commitment to Financial Inclusion Reaffirmed

Governor SBP Mr. Jameel Ahmad, in a meeting with CEO, Alliance for Financial Inclusion (AFI), Dr. Alfred Hannig, emphasized SBP's commitment to financial inclusion, digitalization, and reducing the gender gap, highlighting the NFIS 2024–28. AFI appreciated SBP's leadership. Both parties agreed on deepened collaboration in digital payments, financial literacy, sustainable finance, and MSME financing. Both parties resolved to continue efforts for improving financial health and well-being of masses, especially of unbanked and underbanked population segments. A stakeholder session followed, showcasing SBP's goals and challenges in access to finance.

First Digital Retail Bank License Awarded to Easypaisa Bank

SBP granted Easypaisa Bank Limited Pakistan's first Digital Retail Bank (DRB) license. The DRB license to Easypaisa Bank Limited is expected to promote innovation, enhance financial inclusion, and ensure the availability of accessible and affordable digital financial services. Governor SBP urged the bank to serve SMEs and underserved segments through innovation and digital solutions. He highlighted the need for customer-centricity, cyber security, and digital literacy. Easypaisa's license followed a rigorous process initiated in 2023 with five other digital bank NOCs.

Promotion of Climate-Resilient and Tech-Based Agri-financing Stressed

At the ACAC meeting in Multan, Governor SBP called on banks to prioritize agriculture finance and digital agri-solutions. FY24 saw a record Rs. 2,216 billion agri-credit disbursed. Key focus areas include climate-smart agriculture, Geo-spatial tech adoption, and livestock sector support. SBP plans a stakeholders' meeting in Quetta for Balochistan-specific challenges.

16th SAARCFINANCE Seminar Hosted by SBP

SBP hosted the 16th SAARCFINANCE Seminar titled "Challenges and Opportunities in the Capacity Building of Central Banks and the Financial Industry: Lessons for SAARC Countries" at NIBAF, Islamabad, focusing on capacity building. Deputy Governor SBP emphasized the transformative impact of technological advancements, geoeconomic shifts, and climate change on central banking. He highlighted the growing role of Artificial Intelligence (AI), Machine Learning, and blockchain in enhancing the efficiency, inclusivity, and affordability of financial services. The seminar called for cross-border collaboration, advocating for joint training programs, knowledge exchange, and the establishment of regional centers of excellence.

Financial Deepening and developing Climate Resilience Financing Called for by Governor SBP

At the Pakistan Banking Summit 2025, Governor SBP emphasized enhancing access to finance via SBP's Strategic Vision 2028, targeting 75% account coverage and a reduced gender gap. He urged banks to prioritize SMEs and agriculture over corporates, adopt AI, alternate data, and digitized payments. Governor SBP also urged financial institutions to "improve their ability to assess the impact of climate change across credit, market, liquidity, and operational risks." Underlining the pivotal role of businesses and academia in tackling sustainability challenges, he stressed the need for research, policy recommendations, and fostering collaborations.

Source: State Bank of Pakistan

MANAGEMENT TIPS

BOOSTING PRODUCTIVITY

In today's fast-paced world, staying productive isn't just about working harder—it's about working smarter. By aligning your habits with how your brain and body naturally function, you can accomplish more with less stress. Here are eight science-backed strategies to help you maximize your focus, energy, and efficiency throughout the day.

1. Focus on One Task at a Time (Avoid Multitasking)

"Multitasking reduces efficiency and performance." Switching between tasks creates "attention residue," which hampers focus. Prioritize deep work by batching similar tasks. Train your brain to immerse fully in one task for sharper outcomes.

2. Design Your Day Around Your Energy Peaks

"Work with your body's natural rhythms." Tackle demanding tasks during high-energy periods and save low-energy times for routine work. Track your productivity patterns to align tasks with your peak focus times.

3. Use the 90-Minute Work Cycle

"Working in focused sprints improves performance." Research shows humans can focus intensely for about 90 minutes, followed by a break. Apply this to structure your day into energy-efficient cycles. Use breaks intentionally to recharge and avoid burnout.

4. Minimize Meetings

"Too many meetings reduce actual work time." Audit your calendar weekly, decline unnecessary invites, and opt for asynchronous updates when possible. Protect your deep work hours by setting meeting-free blocks.

5. Set SMART Goals and Review Progress Weekly

"Specific, measurable goals drive accountability and motivation." Break large objectives into smaller milestones. Weekly reviews keep momentum and allow for course correction. Celebrate small wins to reinforce positive habits and motivation.

6. Practice Strategic Procrastination

"Waiting to start a task can spark creative ideas." Purposeful delay—when managed—allows time for incubation and innovation, especially for complex problems. Use this time to gather insights, explore options, and refine your approach.

7. Declutter Your Digital Workspace

"Digital overload drains attention." Turn off non-essential notifications, organize files, and adopt a "zero inbox" mindset to reduce mental clutter. A clean digital environment supports clearer thinking and faster execution.

8. Delegate More Effectively

"Productivity improves when leaders let go of control." Identify low-value tasks and empower team members to handle them. Trust builds capacity and frees up time. Clear instructions and trust are key to successful delegation.

Source: Harvard Business Review

NATIONAL NEWS

Pakistan and Türkiye Enhance Agricultural Collaboration:

Pakistan and Türkiye have agreed to strengthen their collaboration in agriculture and livestock sectors. Officials from both countries discussed establishing joint ventures in areas such as agricultural mechanization, aquaculture breeding, and advanced irrigation systems. Türkiye expressed interest in Pakistan's high-quality agricultural products, aiming to enhance economic ties in these sectors.

Governor SBP Calls for Increased Financial Deepening and Climate-Resilient Financing at Pakistan Banking Summit 2025:

At the Pakistan Banking Summit 2025, the Governor of the State Bank of Pakistan emphasized the need for increased financial deepening in the country to ensure sustainable economic growth. The Governor highlighted SBP's Strategic Vision 2028, which aims to promote inclusive, sustainable financial access, build a digital ecosystem, and enhance the effectiveness of the financial system. He also noted significant progress in financial inclusion, with bank account coverage reaching 64% of the adult population, up from 47% in 2018, and a reduction in the gender gap from 47% to 34%. The SBP has set a target to increase bank account coverage to 75% by 2028 and further reduce the gender gap to 25%. The Governor called for a shift in banks' lending strategies to focus more on SMEs, agriculture, and low-income individuals, urging the use of technology like artificial intelligence and satellite data to enhance financial services. He also stressed the importance of addressing climate change risks and working collaboratively across sectors to promote sustainability.

CM Punjab Inaugurates Solarization of Agricultural Tube Wells Project:

Chief Minister Punjab Maryam Nawaz Sharif inaugurated a mega project for the solarisation of agricultural tube wells, following initiatives like the Kisan Card, Agri Mechanization, and agriculture Internship programs. A draw was held under which 8,000 tube wells will be converted to solar energy in the first phase, and the average farmer is expected to save over ten thousand rupees daily and more than three and a half lakh rupees monthly. The Punjab government will provide a subsidy of Rs 5 lakh for a 10 kW system, Rs 7.5 lakh for a 15 kW system, and Rs 1 million for a 20 kW system. Over 530,000 farmers applied for the project, with 385,000 declared eligible for the draw. The Chief Minister stated that 87% of diesel-powered and 13% of electric-powered tube wells will be converted to solar energy, with the first phase targeted for completion by June.

Sindh Approves 22 New Climate-Resilient Crop Varieties

The Sindh government has approved the cultivation of 22 new high-yield, water-efficient crop varieties including cotton, maize, mustard, rice, pulses, and mangoes to enhance agricultural productivity amid climate change challenges. This decision was made during the second phase of the 36th Provincial Seed Council meeting, where 10 new crop varieties such as CKC1, CKC221, CKC6, Ghori 2, HAF 3, and ICS 386 for cotton were approved, along with one-year partial approvals for three additional cotton and four rice varieties. Other approved varieties include Mazhar Gold, Sindh Rani, and Sarhan for maize, Neela Canola and Neela Toria Gold for mustard, new mango types from Mirpurkhas, sesame variety TS 3, and rice varieties like KSK-434, Basmati 515, and Kainat. The council emphasized the need to adjust farming practices due to rising temperatures and changing rainfall patterns.

Government Plans Deregulation of Wheat Sector:
The Government of Pakistan has announced plans to deregulate the wheat sector starting in fiscal year 2025-26, as part of its commitments under the International Monetary Fund (IMF) program. A national workshop was organized to develop a comprehensive strategy for this transition, which includes discontinuing the practice of announcing support prices and government procurement. The focus will be on ensuring strategic reserves and food security in a deregulated market.

Prime Minister forms committee for cotton crop revival:
In response to the declining cotton production, the Prime Minister has formed a 15-member committee to propose measures for reviving the crop within 30 days. The committee will assess the cotton situation, suggest policy and administrative interventions, and recommend improvements in cotton grading and standardization to meet international standards. It will also provide technical proposals to enhance cotton yield across the country. The local cotton industry is facing severe challenges due to unfavorable import policies and adverse weather conditions, with national production for the 2024-25 crop year falling nearly 50% below the target and 34% below last year's output. Additionally, unexpected weather events, including rains and heatwaves, have severely impacted cotton seed germination, reducing the germination rate to 30-40%, well below the required 70-75%. The committee will also address the availability of certified cotton seeds to farmers.

PM Urges Domestic Manufacturing of Farm Machinery:
Prime Minister Shehbaz Sharif emphasized the need to locally manufacture agricultural machinery to reduce dependence on imports and strengthen the farming sector. Speaking at the launch of the Seed Potato Production and Aeroponics Complex in collaboration with South Korea, the PM said the project would help cut seed imports and improve crop productivity. The complex, developed by PARC and the Korean Programme on International Agriculture, is supported by the Special Investment Facilitation Council to promote modern technology in farming. PM highlighted the importance of affordable access to quality seeds, fertilizers, and pesticides, and called for joint efforts by federal and provincial governments to support farmers. He also urged creating opportunities for agriculture graduates and strengthening SMEs, storage, and value addition in rural areas. The PM thanked South Korea for its support and called for expanding cooperation in other sectors as well.

KP Government to Introduce Dedicated Policy for Mountain Agriculture:
In a major step toward enhancing agricultural productivity in hilly regions, Khyber Pakhtunkhwa Chief Minister Ali Amin Khan Gandapur has directed the formulation of a dedicated "Mountain Agriculture Policy." A concept paper outlining key themes—such as agro-ecological zones, crop and livestock potential, market access, and administrative challenges—has been sent to the Agriculture Department, with instructions to finalize the draft within 45 days. The policy aims to boost mountain agriculture by strengthening research, technology, and extension services in remote areas. Key proposals include the establishment of a Mountain Agriculture Development Board, community seed banks, local cooperatives, and water conservation projects, along with the training of extension agents and implementation of a monitoring system to ensure sustainable development.

Source: www.brecorder.com

ZTBL NEWS

ZARAI ISLAMIC TROUT FISH FARMING FINANCING

To exploit the natural habitat of trout in Gilgit Baltistan, ZTBL IBD has introduced Financing for Trout Fish Farming which will help the customer to enhance livelihood. The purpose of the product is to provide financing facility to the customers through Sale & Lease arrangements of the customer land for the purchase of Trout Fish Breeding and selling afterwards. Initially sale agreement between the bank and the farmer will be executed for the land of the farmer. The farmer will be provided Sale proceeds of the land and the sold portion of the land will be leased back to the farmer through execution of Ijarah agreement. All new as well as old creditworthy farmers of GB Region, are eligible to get financing under the scheme, however preference will be given to those farmers who are already engaged in this agri. business/activity. Maximum financing limit shall be PKR 1.500 Million per customer or as per approved prevailing financing limit and Minimum 10% by the customer as self-contribution. Repayment of Financing will be in 5 Years in annual payments with a grace period of one year.

SHIFTING OF ZTBL DTB SUKKUR BRANCH LOCATED AT QUEENS ROAD, SUKKUR TO SALEHPAT CONVENTIONAL BRANCH, UNDER SUKKUR REGION

It is notified that ZTBL DTB Sukkur City Branch is being shifted as Salehpat conventional branch under same Sukkur Region and as such its operations stand closed owing to its low business portfolio. Total deposit, all vacant Lockers cabinets of said branch has been shifted to adjacent ZTBL Sukkur branch of Sukkur Region. Further, MCO circles No 32 & 36 (Loan Portfolio/Deposit) of Sukkur Branch has also been shifted/transferred to Salehpat Branch.

NEW ISLAMIC LIABILITY-SIDE PRODUCTS LAUNCHED BY THE BANK

ZTBL has launched various Shariah-Compliant liabilityside products, catering the needs of its customers.

- ZTBL Bakht Islamic Current Account:

To ensure women's participation in financial sector and minimize the gender gap in financial inclusion, ZTBL Islamic Banking Division has developed "Bakht Islamic Current Account". The product structure is based on borrowing relationship (QARZ) between the bank and the customer. The customer will be the lender and bank will be the borrower.

- ZTBL Bakht Islamic Saving Account:

In line with SBP Policy guidelines to reduce the gender gap in financial inclusion and to ensure women's participation in financial sector, ZTBL Islamic Banking Division has developed a new deposit product "Bakht Islamic Saving Account". The structure is based on unrestricted Mudarabah arrangement, where the Customer is the Rab-ul-Mal, and the Bank is the Mudarib i.e. Fund Manager. Bank, being the fund manager to the funds of the customers, shall invest the customer money in the Shariah Compliant avenues and profit will be distributed as per agreed ratio and monthly weightages declared by the bank in accordance with the terms and conditions of account opening form.

- ZTBL Islamic Pension Saving Account:

In order to provide Shariah Compliant Banking Account Facility, ZTBL-IBD has developed ZTBL Islamic Pension Account to cater the needs of Pensioners.

- ZTBL Islamic Pension Current Account:

In order to maximize financial inclusion through opening of Pensioners account and to increase the deposit base of ZTBL Islamic Banking Division, the said titled product has been launched by ZTBL. The product structure is based on borrowing relationship (QARZ) between the bank and the customer. The customer will be the lender and bank will be the borrower.

- ZTBL Senior Citizen Islamic (Saving) Account:

ZTBL-IBD has developed deposit product "ZTBL Senior Citizen's (Saving) Account" to facilitate the banking as well as saving needs of Senior Citizens. The structure is based on unrestricted Mudarabah arrangement, the relationship between the Bank and the Customer is based on the principles of Mudarabah, where the Customer is the Rab-ul-Mal, and the Bank is the Mudarib i.e. Fund Manager. Bank, being the fund manager to the funds of the customers, shall invest the customer money in the Shariah Compliant avenues and profit will be distributed as per agreed ratio and monthly weightages declared by the bank in accordance with the terms and conditions of account opening form.

- ZTBL Junior Islamic (Saving) Account:

In order to enhance the canvas of customer portfolio, ZTBL is embarked on a journey to cater to all the needs of every customer. Envisioning it, ZTBL is introducing said account, which is solely meant for Minors (below the age of 18 years). The Account can be opened with the parents or legal guardians. The structure is based on unrestricted Mudarabah arrangement, the relationship between the Bank and the Customer is based on the principles of Mudarabah, where the Customer is the Rab-ul-Mal, and the Bank is the Mudarib i.e. Fund Manager.

CREDIT PLAN - CALENDAR YEAR – 2025

Credit Plan of Rs. 90,000.00 million for the Calendar Year-2025 has been prepared on the basis of Actual disbursement-2024, credit demand by all Regions, NPL & SAM Position of Regions credit potential of the respective regions, and their prospects of financial resources. For a balanced growth of agriculture in the country, field functionaries are advised to please avoid concentration of credit in few hands/sectors at the time of purpose-wise/ item-wise target allocation to branches. Furthermore, special attention may be given to discourage mounting of Non-Performing Loans (NPLs), keeping in view purpose wise historical recovery trend and credit potentials of branches in respective regions.

ENHANCEMENT OF CASH DEPOSTT & WTTHDRAWAL LIMIT FOR ONLINE BANKING CUSTOMERS

In continuation of the previous instructions and to further facilitate ZTBL Online Banking Customers, the limit for online cash deposit and withdrawal transactions are being revised as given below. However, any cash withdrawal requests exceeding Rs.100,000/- must undergo the Call Back Confirmation (CBC) process.

Transaction Type	Existing Limit	Revised Limit
Online Cash Withdrawal	Rs. 1,000,000	Rs. 1,000,000
Online Cash Deposit	Rs. 1,000,000	Unlimited
Online Clearing	Rs. 1,000,000	Unlimited
Online Fund Transfer	Not Applicable	Unlimited
Online Banker's Cheque	Not Applicable	Unlimited