



Pakistan Humanitarian Forum

SPECIAL BULLETIN



WORLD ENVIRONMENT DAY

5 JUNE, 2021

#WORLDENVIRONMENTDAY2021

#ECOSYSTEMRESTORATION

#GENERATIONRESTORATION

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Ecosystem Restoration for People, Nature and Climate UNEP Bulletin, May 2021

The world is facing severe challenges. Billions of people around the world are suffering the consequences of the climate emergency, food and water insecurity, and the COVID-19 pandemic. Ecosystems are an indispensable ally as we meet these challenges.

Protecting them and managing their resources in a sustainable manner is essential. But just increasing the protection and sustainable management of our remaining natural landscapes and oceans will not be enough: the planet's degraded ecosystems and the huge benefits that they provide must also be restored.

The UN Decade on Ecosystem Restoration provides a unique opportunity to transform food, fiber, and feed production systems to meet the needs of the 21st century, and to eradicate poverty, hunger, and malnutrition.

What is Ecosystem Restoration

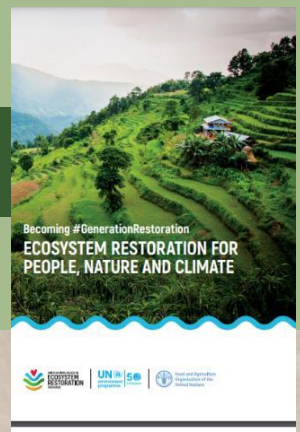
Ecosystem restoration is the process of halting and reversing degradation, resulting in improved ecosystem services and recovered biodiversity. Ecosystem restoration encompasses a wide continuum of practices, depending on local conditions and societal choice. Depending on objectives, restored ecosystems can follow different trajectories:

- from degraded natural to more intact natural ecosystems (often by assisting natural regeneration)
- from degraded, modified ecosystems to more functional modified ecosystems (e.g. restoration of urban areas and farmlands)
- from modified ecosystems towards more natural ecosystems, providing that the rights and needs of people who depend on that ecosystem are not compromised.

[Click here to access the bulletin and read more](#)




UNITED NATIONS DECADE ON
**ECOSYSTEM
RESTORATION**
2021-2030




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KEY FACTS ABOUT WORLD ENVIRONMENT DAY, June 05




Ecosystem restoration is a global undertaking at massive scale. It means repairing billions of hectares of land – an area greater than China or the USA – so that people have access to food, clean water and jobs.




Global greenhouse gas emissions have grown for three consecutive years and the planet is on pace for potentially catastrophic climate change..




Every three seconds, the world loses enough forest to cover a football pitch and over the last century we have destroyed half of our wetlands.




As much as 50 percent of our coral reefs have already been lost and up to 90 percent of coral reefs could be lost by 2050, even if global warming is limited to an increase of 1.5°C.




Over 4.7 million hectares of forests – an area larger than Denmark – are lost every year



Nearly 80 percent of the world's wastewater is discharged to our oceans and rivers without treatment.



Wetlands are being drained for agriculture, with some 87 percent lost globally in the last 300 years.



Present in more than 180 countries, peatlands are vital, super-powered ecosystems. Though they cover only 3 per cent of the world's land, they store nearly 30 per cent of its soil carbon.

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Climate Risk Pakistan Country Profile



Pakistan received much less rainfall in January 2021 as compared to previous years, making it the 17th driest month in 60 years. Countrywide rain was 59% below the normal in January



The majority of Pakistan's 216.5 million people (2019) live along the Indus River, an area prone to severe flooding in July and August.



Pakistan faces some of the highest disaster risk levels in the world, ranked 18 out of 191 countries by the 2020 Inform Risk Index

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Pakistan faces rates of warming considerably above the global average with a potential rise of 1.3°C–4.9°C by the 2090s over the 1986–2005 baseline.



Rises in the annual maximum and minimum temperature are projected to be stronger than the rise in average temperature, likely amplifying the pressure on human health, livelihoods, and ecosystems.



Changes to Pakistan's rainfall and runoff regimes, and hence its water resources, are highly uncertain, but an increase in the incidence of drought conditions is likely.



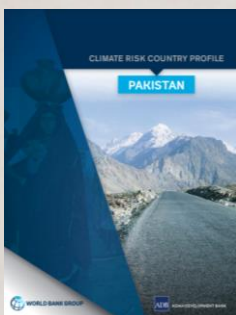
The frequency and intensity of extreme climate events is projected to increase, increasing disaster risk particularly for vulnerable poor and minority groups



An increase in the number of people affected by flooding is projected, with a likely increase of around 5 million people exposed to extreme river floods by 2035–2044, and a potential increase of around 1 million annually exposed to coastal flooding by 2070–2100.



Temperature increases are likely to place strain on urban dwellers and outdoor laborers, with increased risk of heat-related sickness and death likely under all emissions pathways.



[Click here to read more on Climate Risk
Country Profile- World Bank Group](#)

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Selected indicators from the INFORM 2019 Index for Risk Management for Pakistan.

Flood (0-10)	Tropical Cyclone (0-10)	Drought (0-10)	Vulnerability (0-10)	Lack of coping capacity (0-10)	Overall Inform Risk Level (0-10)	Rank (1-191)
8.9	3.8	5.1	5.7	5.6	6.2	18

For the sub-categories of risk (e.g. “Flood”) higher scores represent greater risks.

Pakistan faces some of the highest disaster risk levels in the world, ranked 18 out of 191 countries by the 2020 Inform Risk Index. This risk ranking is driven particularly by the nation’s exposure to earthquakes and the risks of internal conflict.

However, Pakistan also has high exposure to flooding (ranked jointly 8th), including, riverine, flash, and coastal, as well as some exposure to tropical cyclones and their associated hazards (ranked jointly 40th) and drought (ranked jointly 43rd). Disaster risk in Pakistan is also driven by its social vulnerability. Pakistan’s vulnerability ranking (37th) is driven by its high rates of multidimensional poverty. Pakistan scores slightly better in terms of its coping capacity (ranked 59th).



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PAKISTAN HOSTS WORLD ENVIRONMENT DAY 2021: CELEBRATING ECOSYSTEM RESTORATION



There are also efforts to restore wetlands, such as the Miani Hor Lagoon, home to the largest mangrove forests along the Balochistan coast.

In 2020, government-led efforts brought together non-governmental organizations and local fishermen and women to restore land using over 250,000 nursery plants and 461,000 cuttings. The programme is beginning with a goal of 404 hectares, expanding to 1,214 hectares over the coming years. The government is also developing a novel debt-for-nature scheme to ease its debt burden and accelerate the 10 Billion Tree Tsunami.

As the leader of one of the world's most ambitious forest landscape restoration efforts, Pakistan is hosted World Environment Day 2021, celebrating the year's theme of ecosystem restoration and the launch of the UN Decade on Ecosystem Restoration.

Over the next five years, the 10 Billion Tree Tsunami programme will aim to expand and restore Pakistan's mangroves and forests, while also generating jobs amid the COVID-19 pandemic, boosting conservation and curbing the impacts of climate change. In alignment with international and national commitments, the campaign focuses on forest restoration in both rural and urban areas, including growing trees in schoolyards, colleges, public parks and green belts.

This flagship programme will contribute to the country's goals to conserve and restore its fragile ecosystems and safeguard the livelihoods of communities.



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KEY INITIATIVES BY THE GOVERNMENT TO BUILD CLIMATE RESILIENCE IN PAKISTAN

National Adaptation Plan for Climate Change

Pakistan has officially begun the process of creating a National Adaptation Plan for building resilience to climate change- one of the most important mechanisms for adapting to climate change. A two-year project to develop the adaptation plan, supported by the UN Environment Programme (UNEP) and funded by the Green Climate Fund with USD 2.7 million, was formally launched on Thursday 25th March 2021. The National Adaptation Plan process is accordingly being aligned with the NDCs to ensure coherent implementation and will be looking to build on these existing nature-based approaches, which include the Ten Billion Trees Tsunami Program, the Ecosystem Restoration Fund, and the Recharge Pakistan initiative.

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National Ozone Unit

The Montreal Protocol on the Substances that Deplete the Ozone Layer was signed in 1987 at Montreal and was signed and ratified by Pakistan in 1992. Being a signatory to the Protocol, Pakistan is committed to phase-out the use of Ozone Depleting Substances (ODS). National Ozone Unit (Ozone Cell) was established in the Ministry of Environment, Government of Pakistan in 1996 to monitor and ensure implementation of the Montreal Protocol through various policies and regulatory measures with the assistance of Ministry of Commerce, Central Board of Revenue and other stakeholders. Pakistan is not an ODS producing or exporting country but imports these

ODSs for its domestic needs. Pakistan has already banned the import of first generation of ODS (i.e. CFCs, Halons, CTC, Methyl Bromide, Methyl Chloroform etc.) by 1st January, 2010 under the provision of the Montreal Protocol.

The Ozone Cell extends assistance to the local ODS-based industry for its conversion into Ozone friendly technology through the implementing agencies (UNDP, UNEP, UNIDO & World Bank) with the financial assistance of the Multilateral Fund (MLF) for the Implementation of the Montreal Protocol. United Nations Development Programme (UNDP) is also responsible for the institutional strengthening of the Montreal Protocol Project (Ozone Cell), while the United Nations Environment Programme (UNEP) extends assistance in capacity building and awareness activities.

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Sustainable Forest Management to Secure Multiple Benefits in Pakistan's High Conservation Areas

Sustainable forest management is a means of protecting forests whilst offering direct benefits to people and the environment. It contributes to local livelihoods and offers environmental benefits such as carbon sequestration and conserving water, soil and biodiversity.

The project focuses on seven forest landscapes (145,300 hectares) containing three vulnerable and important forest types: temperate coniferous forests in Khyber Pakhtunkhwa, dry scrub forests in Punjab, and riverine forests in Punjab and Sindh.

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The Himalayan ecosystem in northern Pakistan has critical importance for the biodiversity of global significance. It harbors life-support system and provides essential ecosystem services for millions of people including the remote agro-pastoral communities. This region encompasses range of snow leopard that extends from the Central and Southern Asia across twelve range countries. The landscapes are under severe threat from high dependence of local communities on natural resources, ill planned economic development, removal of medicinal plants, illegal wildlife trade and wildlife crime.

the 5-years project “Pakistan Snow Leopard and Ecosystem Protection Program” was developed and is being implemented by the Snow Leopard Foundation in collaboration with Ministry of Climate Change

and UNDP-Pakistan with funding (US\$4.64 million) from the Global Environment Facility (GEF) since, September, 2018. Wildlife departments of Khyber Pakhtunkhwa (KP), Gilgit Baltistan (GB) and AJ&K are the coordinating agencies at province/State level. The project objective is to promote a landscape approach for the survival of snow leopard and its prey species by reducing threats and applying sustainable land and forest management in critical habitats in Northern Pakistan.

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Tackling plastic waste to reduce its environmental impact

Clean Hunza Project



Clean Hunza Project focuses on a waste segregation and recycling system for Hunza by encouraging waste management of 200,000 kilograms of plastics in 2021, eventually leading up to 1,000 tonnes by 2025 to [help] make Hunza waste-free and promote sustainable tourism in the region

The Hunza district, declared in 2020 the first plastic-free district in the country, has moved another step forward by installing a compressing and bailing machine for plastics and paper waste management. Located on Karakoram Highway at an altitude of 2,500 metres above sea level, Hunza is one of the most popular tourist destinations in Pakistan with almost 1.2 million tourists having visited the region in 2018. Launched in 2019, Clean Hunza Project is part of Hunza district council's initiative on waste management, in partnership with Nestlé Pakistan, Gilgit Baltistan Waste Management Company (GBWMC) and KADO (Karakoram Area Development Organisation).

Pakistan generates approximately 48.5 million tonnes of solid waste a year, which has been increasing by more than 2% annually. Out of which, 9% is plastic and 6 percent is paper waste. Pakistan has the highest percentage of mismanaged plastic in South Asia. The percentage of plastic waste is much higher than in India (2%), Sri Lanka (6%), Bangladesh (7%), and Iran (11%).


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Reverse Vending Machine Launched at Islamabad

The RVM is part of the government and Prime Minister's Clean Green Pakistan program and committed to take significant steps towards tackling the issue of plastic waste. The vending machine facilitates the people to recycle on the move. Plastic bottles of any brand can be used in the machine. The consumers on the touch screen have to press the start button and the RVM will open up a slot to receive the plastic bottle (of any brand and size). Once deposited, the RVM compresses the bottle so that it is ready for the next steps of recycling. After it gets crushed to be recycled and the machine will give you a coupon of Rs.100 incentive.

[Click here to read more](#)



A black and white photograph of a woman wearing a headscarf and a patterned dress, working in a field of small white flowers. She is bent over, tending to the plants. The background is a hazy, open landscape.

ing Sustainable Solutions to Disasters
Drought & Fire) Response in Tharparkar
- BEST 2020

KITCHEN GARDENING

e: - Magho

and Name: - Chatro

ge: - Naharo Bheel

n Council: - Rajoro

SIF -Mission Pakistan

PHF MEMBER STORIES BUILDING CLIMATE RESILIENCE

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A woman farmer rises from adversity



Meghi is 40 years old and a resident of Geno Kolhi village in District Badin. She has three family members. Her main source of livelihood is agriculture.

"I grow vegetables to meet my family's food security needs. Nutrient-rich vegetables also add to the diversity in our diet. By cutting down on food related expenditures, my savings helped me meet other expenses such as for health and agricultural inputs," says Meghni, one of the beneficiaries of the ACF's kitchen gardening intervention in Badin District of Sindh Province.

Over the years, Geno Kolihi Village has experienced different disasters such as floods, heatwaves, drought, and severe water shortages every other year, making it extremely challenging for vulnerable households to meet their food security needs. ACF introduced kitchen gardening in the target village to improve women's skills in vegetable production for sustainable sustenance. These women learned various kitchen gardening techniques, organic mulching, and irrigation techniques to grow different seasonal vegetables.

Meghni is one of 2,250 women farmers, who practiced kitchen gardening together with the

technical support from ACF and its implementing partner, LHDP. Even though target households were mostly dependent on agriculture for their livelihoods, none of them had vegetable gardens before the intervention. This effort was part of ACF's support for recovery of agriculture-based livelihoods of vulnerable men and women farmers affected by multiple disasters under the Skala funded project "Strengthening resilience to natural disasters of most vulnerable population through increased disaster preparedness and nutrition-sensitive emergency assistance".

"I heard about by ACF and Laar Humanitarian & Development Program (LHDP) teams organizing meetings in my village under the Skala project through my friend and I decided to join them. I received training on kitchen gardening, kitchen gardening tools and received different types of vegetable seeds for my kitchen gardening plot".

Meghi learned to convert a small piece of land into a kitchen garden by making ridges to cultivate vegetables. She also applied irrigation techniques that she learnt from the training to conserve soil moisture.

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A woman farmer rises from adversity



Meghi has already grown different vegetables in her small kitchen garden.

"I have cultivated seasonal vegetables such as okra, ridge gourd, cluster beans, round guard, and chilies among many others. I applied integrated pest management, farmyard manure and mulching for vegetable growth and production. I am also using improved irrigation techniques to ensure rationalized use of water in view of the water scarcity. I am thankful to ACF and LHDP for enhancing my skills and providing me with the kitchen gardening tool kit. Kitchen gardening has saved me a lot of money spent on food that we would otherwise spend on purchasing the same vegetables from the market at a much higher price," Meghni added.

Meghi and other women farmers of the village also took part in awareness campaign on climate change adaptation, training on saline tolerant fodder, and learnt techniques on re-using agricultural land that had been abandoned due to salinity.

"By cutting down on food related expenditures, my savings helped me meet other expenses, such as for health and agricultural inputs."

- Meghi

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Climate Smart Agricultural Trainings for Drought-Affected Areas



The villages of District Tharparkar are remotely located with limited access to agricultural extension services, further exacerbated by the lack of timely information on climate change and its consequent negative impacts on crops productivity. Thus, the vulnerable and poor resource farmers continue to engage in traditional and inefficient agricultural practices for farming which are also environmentally damaging at times

Building Disaster Resilience in Pakistan (BDRP) is a multi-year humanitarian intervention, funded by Foreign Commonwealth and Development Office (FCDO), aimed to increase Pakistan's capability to reduce disaster risk through better planning, preparedness and response at government and community levels. Under BDRP, the component entitled "Capacity building of farmers on Climate Smart Agriculture (CSA) and Conservation Agriculture Based Technologies and Practices" was introduced in coordination with relevant government departments and FAO. Appropriate trainings for the target communities based on their needs and understanding were designed and rolled out in District Tharparkar to

not only prepare them to cope with climate-related natural disasters, adopt risk mitigation measures but also introduce them to sustainable livelihoods and environmental management practices on-farm and off-farm.

53-year-old Imtiaz Khan from the Village Faqeer jo Tarr, in the Union Council of Tarr Ahmed is a beneficiary of the CSA sessions. Imtiaz Khan is a daily wage labourer with six children to look after. His small piece of land outside his home was mostly a playground for the children. Soon after receiving the practical and hands-on CSA trainings in September 2019, he delved into farming through sowing the two types of seeds provided to him during training sessions, with the technical assistance from his trainers.

These included the fodder seed, purchased from the Arid Zone Research Institute (AZRI) – Umerkot, and the Quinoa seed provided by the University of Agriculture, Faisalabad.

"I learned techniques such as crop rotation, multi-cropping and zero tillage along with water conservation techniques. The field staff visited my plot and provided practical solutions for better results", says Imtiaz Khan. During the training sessions, the participants were told to share their learnings with their fellow farmers. Once Imtiaz started getting results, other community members started taking interest and consulted him.

"Before the CSA trainings, I did not know the power of the Thar soil. I thought how can something grow when there is hardly any water. The CSA trainings changed my perception and I learned how to plant different varieties of livestock fodder such as bhurat (indigenous seed), white dhaman, black dhaman, chamol, cotton, tomatoes, chillies along with other vegetables all the while using very little water.

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Climate Smart Agricultural Trainings for Drought-Affected Areas



Due to the production of these fresh vegetables, the nutrition of Imtiaz Khan's family improved along with a significant improvement in the health of his livestock due to the fodder availability. Imtiaz Khan practiced the CSA techniques learnt throughout the year during both winter and summer season. During winters, Imtiaz sold the additional produce of carrots and white radish in the nearby market at a fair price, because of which he opened a small retail shop.

"The trainings have not only taught me how to produce crops, but they have also been instrumental in teaching me the importance of entrepreneurship. I used to be away from home all day in search of work with hardly any savings. Thanks to BDRP, I have not only improved my agricultural skills but have been able to establish two businesses from home", Imtiaz Khan said with an air of pride. As a result of the climate smart agricultural trainings under BDRP, Imtiaz Khan has established strong linkages with officials from Concern's local partner Research and Development Foundation (RDF), AZRI, UNFAO, Sukaar Foundation and local progressive farmers from his batch.

"I used to be away from home for weeks and had no schedule. The income from my produce has allowed me to open a retail shop on one corner of the garden. I get regular customers from the village and since I am working in my garden, I can simultaneously attend to the customers as well."

- Imtiaz

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Working for communal good

CONCERN
worldwide



Pakistan has seen a rise in unemployment, inflation and subsequently the number of beggars on the streets in recent years. The current pandemic of Covid-19 has further aggravated the situation, with more unemployed people opting for begging to fulfill their most basic everyday needs.

43-year-old Dure belongs to a minority group living in village Karo Kolhi, Union Council Mulakatiar, Taluka Bulti Shah Karim, District Tando Mohammad Khan. Dure has three children and a husband who is chronically ill since 2017. Her only source of income is seasonal unskilled labor in agricultural lands, which is not a sustainable means of work and pays very less as compared to the hard labor associated with it. Being an unskilled worker, Dure has no option but to beg outside the town during the off-season to feed her family.

The project 'Early Recovery Intervention for Flood Affected Population in Sindh' under Natural Disasters Consortium (NDC) funded by Foreign, Commonwealth & Development Office (FCDO), started in January 2021 in five UCs of District Tando Mohammad Khan and five districts of Dadu. Tardeep Rural Development Programme (TRDP) is the implementation partner of Concern Worldwide (CWW). The project aims to provide early recovery support for populations affected by heavy rains and floods in August 2020. Keeping in view the pressing needs of the affected population in terms of their livelihoods and means of income generation, cash assistance through Cash for

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Working for communal good

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Work (CfW) modality is also part of the project support activity. Short-term interventions under CfW provide temporary employment to the most vulnerable crisis-affected population by engaging them in public and communal projects (such as construction, rehabilitation or repair of communal infrastructure).

The TRDP field teams conducted beneficiary selection as per the beneficiary selection criteria for the CfW activity. Dure was among the 400 beneficiaries being supported for the particular activity as unskilled labor. She worked with other members of the village on a construction scheme. When asked about the CfW activity under the project, Dure expressed her happiness and said, "I was selected as one of the unskilled labor and worked with other members of the community for a good communal cause. Our village used to get disconnected in heavy rainfall and we would usually place a temporary wooden block to connect the village to the road, which was not a feasible option.

"I am proud to be part of the team involved in the construction. Not only was I involved in a good cause, but I was paid PKR 8,000 for the work. I have purchased food, medicine and returned some portion of the loan which I had taken earlier from my family members"

- Dure

Thanks to TRDP and CWW, we now have proper route / culvert in our village. Everyone in the village is so happy. I am proud to be part of the team involved in the construction. Not only was I involved in a good cause but I was paid PKR 8,000 for the work. I have purchased food, medicine and returned some portion of the loan which I had taken earlier from my family members."

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Creating Sustainable Agricultural Ecosystems in Pakistan



Pakistan being an agrarian economy is critically endangered by climate risks. Over the years climatic changes and their effects have become quite evident. What was previously thought of as a hoax in many segments of the society is now coming to be considered as a reality. Erratic and unprecedented weather patterns are being witnessed around the world. Due to lack of preparedness, the farming community in particular is bearing the brunt of these changes with their incomes dwindling and pushing them further into poverty. An understanding of adaptation measures therefore is essential to avoid and minimize risks associated with unpredictable weather patterns due to climate change.

Helvetas Swiss Intercooperation (Helvetas) is currently implementing a project called Water Productivity (WAPRO) in Sheikhpura and Gujranwala districts of Punjab, aimed at improving resilience of small farmers against climate change.

Rice is one of the major cash crops of Pakistan. Traditionally rice is cultivated through flood irrigation method in which water is purposefully stagnated for transplanting seedlings. This process results in high levels of methane emission. Flood irrigation also requires enormous quantities of water to produce rice which is being questioned in water-scarce countries like Pakistan. Methane emission from irrigated rice is responsible for 70–80% of global methane emission, followed by rainfed rice (15%) and deep-water rice (10%). Thus, irrigation efficiency in rice production represents one of the most promising mitigation strategies for decreasing Green House Gasses (GHG) from farming sector.

Helvetas has partnered with two leading rice millers of Pakistan (Rice Partners Limited and Galaxy Rice Mills) to introduce sustainable rice producing practices which include irrigation efficiency. Farmers undergo a rigorous training and mentoring program that helps them understand and adopt best global practices in agriculture and the use of modern technologies to

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Creating Sustainable Agricultural Ecosystems in Pakistan



become resource efficient while improving yields and quality of their produce. Alternate Wetting and Drying (AWD) tubes is a simple technology farmers use to reduce demand for irrigation water. AWD tubes guide farmers when to irrigate fields and thus help reduce number of irrigations and thus reducing methane emission from rice fields. On pilot basis, Helvetas has supported farmers with 5000 AWD tubes to cover an area of 6000 acres.

Another useful technique used for reducing irrigation and energy in application of irrigation is precision land leveling through laser land levelling equipment. So far, the WAPRO project has supported laser land levelling on 10,000 acres of arable land on cost sharing basis (50%). Helvetas has been successful in convincing farmers that leveling is a fundamental necessity to improve yield and reduce water intake. Direct seeding of rice (DSR), also known as aerobic rice, is another technique being experimented under WAPRO. Under this technique, seeds are directly sown in the field and number of irrigations drastically reduces. WAPRO has supported farmers to established 100 plots of DSR on

200 acres of land. Under the WAPRO project farmers also receive training on other aspects of sustainable rice production such as best practices in application of pesticides and fertilizer. In return for producing rice, using sustainable practices, the rice miller ensures that farmers receive premium price for their produce.

Around 20,000 rice farmers and their families have benefited from the WAPRO program. Currently, WAPRO is planning an awareness campaign for consumers to make them aware of their contribution by appreciating water efficient rice on shelves when they choose products.

In collaboration with another project of Helvetas (Child Welfare in Commercial Agriculture), WAPRO also promotes a conducive and safe work environment for farm labourers and their families. This includes training on basic health and promoting education for children of rice transplanting families.

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Green Pakistan Campaign



HHRD YEP has been launching Green Pakistan Campaign annually with a focus on two major themes, saving the environment and the spirit of humanitarianism. Under the theme of environment, university students are encouraged to take the lead in planting more trees, while under the theme of humanitarianism, the youth are encouraged to take positive steps for the welfare of humanity.

Tree Plantation Drive 2021 (Model Fruit Garden) in University of Chitral

HHRD Youth Empowerment program (YEP) in collaboration with University of Chitral (UOC) organized tree plantation drive in University of Chitral. 58 different varieties of trees like Araucaria, Lemon, Yucca, Orang etc. are planted. Vice Chancellor University of Chitral Prof Dr. Zaheer Shah inaugurated the campaign by planting a tree, highlighted the importance of plantation and appreciated the efforts of HHRD.

Tree Plantation Drive 2021 (Model Fruit Garden) in Karakorum International University, Diamer Campus, Gilgit Baltistan

HHRD Youth Empowerment Program in collaboration with Karakoram International University, GB organized

a Seminar on "Tree planting, a key weapon against global warming" and planted 80 fruit trees including almonds, apricot, walnut etc.. at KIU Diamer Campus. Dr. Shahnawaz Director Campus. Deputy Director Agriculture Noor Muhammad inaugurated the ceremony. He appreciated the students for volunteering this campaign.

Tree Plantation Drive 2021 (Model Fruit Garden) with collaboration of Rescue 1122, Rawalpindi

HHRD Youth Empowerment Program in collaboration with Rescue 1122 Rawalpindi organized a "Tree planting" drive in Rawalpindi "A key weapon against global warming".

Volunteers and youth alumni members planted 60 trees in the Rescue 1122 vicinity. Youth expressed their concern and pledges to help become part of the environmental campaign to make our planet a better and healthier place to live. Rescue officers introduced the youth to the operations and the different tools involved in Rescue missions like car accidents and other hazards.

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Green Pakistan Campaign



Tree Plantation Drive 2021 (Model Fruit Garden) with collaboration of Khawaja Fareed Engineer University, Raheem Yar Khan

YEP organized Green Pakistan plantation activity in collaboration with Khawaja Fareed Engineer University, Raheem Yar Khan and planted 130 saplings.

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Combating Climate Change by yield of multipurpose Moringa trees



Malteser International, a German based organization is working in drought affected district of Sanghar Sindh Province. With Financial support of German Federal Foreign Office, Malteser International planted 55,162 plants of Moringa trees in District Sanghar. The initiative is not only important to combat climate change but also plays a significant role to improve livelihoods. It provides multifarious benefits to the local community and is one of the most nutrient-dense food on the planet.

On World Environment Day 2021, it is pertinent to mention that this drought resistant initiative is not only contributing to the global restoration movement towards sustainable future but is also contributing to the 10 billion tree tsunami of government of Pakistan.

Fast-growing, drought resistant Moringa tree is native to the subcontinent and called Sohanjino in Sindhi language. It is widely cultivated for its young seed pods and its leaves are used as vegetable and in traditional herbal medicine. Under Malteser's plantation drive, two saplings of Moringa were planted in Ambiyō's courtyard, situated in UC Jam Nawaz Ali's village Golio Meghwar. The tree plantation drive left its positive footprint on area's environment as no less than 55,162 Moringa saplings have been planted.

Ambiyō believes that it was a very wise decision on part of Malteser to select Moringa for their plantation campaign. "Moringa is a sun-and-heat-loving plant, and does not tolerate freezing or frost. It is particularly suitable for dry regions, just like ours, as it can be grown using rainwater without expensive irrigation techniques. There is a saying in Sindh which goes like 'sohanjino cures 32 disease'.

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Combating Climate Change by yield of multipurpose Moringa trees



Its vegetable is very delicious in taste and nutritional value is also very high,” Ambiyu said.

Sanghar’s land and environment is conducive for the plantation of trees like sacred fig, gum Arabic, Albizia Lebbeck, Prosopis Cineraria, Indian Lilac and Eucalyptus but what makes Moringa stand out among other species is its rapid growth and multiple benefits, being an iron-packed source of nutrition.

Gul Sher, resident of UC Hout Wassan’s village Ali Muhammad Khaskheli, is another beneficiary of Malteser’s Moringa plantation. The 55-year-old veteran is a tree-lover and fond of Moringa for its medical benefits. “Moringa extract helps treating conditions such as arthritis and may also heal wounds damaged bones. Moringa seed oil protects and nourishes hair and skin. Vegetable made with its leaves and flowers is always protein-

rich,” Gul Sher said.

When asked how he has benefited by the Moringa tree planted in his courtyard by Malteser, Gul Sher responded: “This was planted just 5-6 months ago. When the plant is grown from cuttings, the first harvest can take place 6–8 months after plantation. Often, the fruits are not produced in the first year, and the yield is generally low during the first few years. By year three, it produces hundreds of pods, by year four in thousands,” he said.

Overall, this 55,162 plants of Moringa will contribute in reducing the worst impact of climate change in a longer run and will enhance resilience of drought affected community.

WORLD ENVIRONMENT DAY

PHF WEEKLY BULLETIN - SPECIAL FEATURE

Overcoming challenges of climate change to save humanity & resources by installing biogas plants project



Iqra Zaheen is a student of MSc Hons. Climate Change in MNSUAM (Muhammad Nawaz Shareef University, Multan) who was selected by British Council for COP26-Challenge Fund. She was selected for her brilliant performance in social action project design under course of active Citizen Education. Due to her excellent record in 2018, she was selected by British Council for international study visit to UK. She then founded her own foundation Al Iqbal Foundation, in her father's name.

Iqra Zaheen has done tremendous work on overcoming the challenges of climate change and save humanity by installing biogas plants project in rural area of Mailsi, southern Punjab, Pakistan. Al Iqbal Foundation implemented social action project sponsored by British Council Pakistan and technical support of Muslim Hands Pakistan.

Team members of Iqbal Foundation visited the site along with member of Muslim Hands Mr. Mohsin Ishaq and selected the place and beneficiaries for the bio-gas project. The project will solve the wood burning that emitted gases like carbon dioxide. Women made extra effort to collect waste of crop from the field and making "uppla" from cow dung for burning purposes. The amount of carbon dioxide produced during burning of stove can damage atmosphere and become cause of diseases like asthma

At initial stage of the project, ten families (one biogas plant for one family) can benefit from the project. With the consultation of Punjab Biogas technical resource and British Council it was decided that four Biogas plants will be constructed. Each biogas plant serves 5 families and 20 families will get benefit from



the project. 150 community members directly and 1,000 will indirectly benefit from the project. Two plants were completed in the holy month of Ramadan and started the production. Currently, 10 families are using gas for cooking purposes. Moreover, two plants are under construction. Each plant requires 2 marlas of land that is also donated by the beneficiaries. Shelf life of each biogas unit is 40 years.

Construction of biogas plants was possible due to the support of Punjab Domestic Bio gas, support from MNSUAM, local community and technical support by



British Council and Muslim Hands Pakistan. Iqra Zaheen on the platform of Al Iqbal foundation was convinced to donate four canals of land to Muslim Hands for the construction of MH school.

WORLD ENVIRONMENT DAY

PHF WEEKLY BULLETIN - SPECIAL FEATURE

Turning challenges into opportunities



Mehrunnisa, a 35-year-old farmer is a beneficiary of a High Efficiency Irrigation System and the General Secretary of her Community Organisation. She was married at 15 and has four daughters and two sons. After the 2003 floods, the land has been barren and there has been severe scarcity of water. She had to walk for an hour to collect drinking water.

And there had been days when there wasn't enough money for food. Mehrunnisa along with her husband would do labour work on the lands of feudal lords, picking cotton and chilies, barely earning enough to put food on the table. To provide fodder for their livestock, they would cut grass, bundle it up and bring it home. They would sell the surplus to neighbours to earn some extra money.



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PHF WEEKLY BULLETIN - SPECIAL FEATURE

Turning challenges into opportunities



From the training she received, she has learnt to save every drop of water and grow her own vegetables in a garden near her home. She has learnt the value of recycling water from home to be used in her plot. They have stopped using pesticides from the market and are using natural alternatives like neem and cow dung. These new practices have catered to the scarcity of water in the area, requiring far lesser water and have helped Mehrunnisa and her family take a huge step forward.

Under the Building Resilient Communities in Pakistan Project (funded by the Australian NGO

Cooperation Program), farmers and agricultural laborers, especially women like Mehrunnisa, were introduced to Climate Smart Agricultural techniques and trainings to overcome water shortages and tackle low crop yield. Mehrunnisa along with local farmers in the area have adopted High Efficiency Irrigation Systems, requiring the least amount of water needed for crops such as cotton. Mehrunnisa works with her husband on their demo plot, operating the water

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PHF WEEKLY BULLETIN - SPECIAL FEATURE

Turning challenges into opportunities



OXFAM



Photo: Alwaid Sharif Films/Oxfam

They have also adopted techniques such as intercropping for kitchen gardening, orchard farming, and switching to drought-resistant crop types and varieties, such as mud-apples, chilli's, okra, etc. Mehrunnisa has improved her farm yield considerably through Climate Smart Agricultural practices, earning up to PKR 60,000 additional income each season.

"I hope to reap the benefits by providing good food to my kids so that I can give them the best nutrition I possibly can. I also want to be able to give them an education and start saving money because I haven't been able to do that before. It is my dream to be so independent that I can support and help my family all on my own. I want to stand on my own two feet."

"I hope to reap the benefits by providing good food to my kids so that I can give them the best nutrition I possibly can. It is my dream to be so independent that I can support and help my family all on my own. I want to stand on my own two feet."

- Mehrunnisa

WORLD ENVIRONMENT DAY

PHF WEEKLY BULLETIN - SPECIAL FEATURE

Launch of Red Alert Campaign



Save the Children



Save the Children in collaboration with the Ministry of Climate Change launches the Pakistan Chapter of the “Red Alert Campaign” on Climate and Environment Conservation

Save the Children International (SCI) in Pakistan hosted an event to commemorate World Environment Day 2021 in partnership with the Ministry of Climate Change (MoCC) on 7th June 2021 and launched the “Red Alert Campaign” – an advocacy campaign on climate change and environmental conservation that is geared towards raising awareness amongst the general public about the urgent nature of the climate crisis. It also seeks to target and involve the youth in climate related discourse and action by providing them with platforms to raise their voice, share their ideas and opinions, and engage with decision makers and policymakers about climate change at the national, regional and global level. The Red Alert Campaign is an initiative of Save the Children in Asia and has been launched in over 15 countries across the region.

Save the Children provides an international platform for young climate change activists through their Red Alert on Climate Campaign. Eisha is a 16-year-old climate activist from Pakistan and has been selected as Save the Children Pakistan’s Regional Youth Spokesperson on Climate change. As well as being active locally on this issue, Eisha is a spoken on multiple international events and platforms and has been featured in several digital advocacy and communications materials over the past year.

The launch event fostered an insightful, interactive and critical discussion on the urgency of the climate crisis, bringing the youth together with global leaders, policymakers and civil society. The Red Alert campaign is a youth focused advocacy initiative, and in that spirit a few of Pakistan’s young climate activists discussed issues and potential solutions related to climate change from the perspective of the youth. The young activists also urged global leaders, particularly those belonging to industrialized countries, to increase efforts to combat the impending climate crisis for the sake of future generations.

WORLD ENVIRONMENT DAY

PHF WEEKLY BULLETIN - SPECIAL FEATURE

Launch of Red Alert Campaign



Save the Children



WORLD ENVIRONMENT DAY 2021

Save the Children Pakistan in partnership with the Ministry of Climate Change (MoCC) is launching a RED ALERT Campaign on Climate

June 7, 2021
at 1.30 - 3.30pm



Zartaj Gul
Minister of State for
Climate Change



Naheed S. Durrani
Federal Secretary for
Climate Change



Richard Snelsire
US Acting Deputy
Chief of Mission



**H.E. Bernhard
Schlagheck**
German Ambassador



Wendy Gilmore
Canadian
High Commissioner



**Muhammad
Khuram Gondal**
Country Director
Save the Children



Narmeen Adeel
Advisor Program
Quality Evidence
& Impact
Save the Children



Ahmad Saeed
Advisor
Climate Change
Save the Children



Shaheen Chughtai
Regional Advocacy
& Campaign Director
Save the Children



Eisha
Youth Climate
Change
Activist
Pakistan



Zikrullah
Youth
Climate Change
Activist
Pakistan

"People, businesses, government should play their part by reducing pollution and CO2 emissions, rebuilding wildlife habitats and living more sustainably."

- Eisha, Save the Children Pakistan's Regional Youth Spokesperson on Climate Change

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WORLD ENVIRONMENT DAY

PHF WEEKLY BULLETIN - SPECIAL FEATURE

Kitchen Gardening and Poultry Birds Provision in Peshawar & Charsada



“A little thing that can make a big difference” shared by Gul Bakhta Bibi. She is a widow and mother of 8 children, residing in Village Hindu Kasay, Tehsil Panam Dheri, District Peshawar. Her husband was a mason. After his death, the household not only lost the head of family but also an earning hand. She did not lose hope and soon after took up financial responsibilities of the family.

She was earning 100-200 PKRs daily doing small chores as a maid, which was not enough to feed her children. In her free time, she cultivated a small piece of land where she grew wheat crop, but the yield was insufficient to meet the needs of the family.

Due to the interventions of SIF, she received a kitchen gardening package containing 100-gram of different seeds, 2 kg fertilizer pack, 1 garden trowel, plastic watering can, rake, shovel, reap hook and later on she also provided 5 hen and one roaster, as well as PKR 1,000 for making hen houses.

It has been 2 months since she has been managing here kitchen gardening plot as well as poultry birds. SIF was able to uplift her socio-economic status this initiative. Luckily, at the same time, her hens also

start laying eggs regularly (5 eggs per day). She sells them in the local market @15 PKR per egg which earns her a good amount monthly (PKR 2,250).

“I will continue this business for the rest of my life . The support provided by SIF gave me back my dignity and a respectable life.

Most importantly, now I am no longer working in other people’s houses. I just focus on my own vegetable plot and manage my poultry.”

- Gul Bakhta Bibi

WORLD ENVIRONMENT DAY

PHF WEEKLY BULLETIN - SPECIAL FEATURE

FLORA- exploring indigenous solutions to hunger and malnutrition in Tharparkar, Sindh



For a world without hunger



Pakistan ranks 5th on the Global Climate Risk Index, with frequent droughts, floods, locust and generally a high vulnerability of communities to natural disasters and respectively challenged resilience. One of the most affected districts is Tharparkar in Sindh with high prevalence of food and nutrition insecurity and a high number of populations living under the poverty line. Tackling the persisting food and nutrition security crisis, Welthungerhilfe and its partner SUKAAR Foundation are testing an innovative approach exploring indigenous solutions.

The arid Tharparkar offers rich biodiversity including herbs, shrubs and plants growing wild and thus largely organic. Though being nutrient-rich these food sources are often under-utilized, due consumption preferences and knowledge about the nutritional value of these foods. In its "FLORA" project, WHH and SUKAAR in cooperation with research institutes are investigating availability and nutritional values of edible flora and promote the possible use in households through recipes to contribute to a reduction in malnutrition.

Mr. Wali Muhammad Nohri, a social activist and volunteer associated with the SUKAAR Foundation, participated in the project's consultative workshops on "Exploring indigenous solutions to hunger and malnutrition in Tharparkar".

Being a resident of Tharparkar, he then supported SUKAAR in identifying indigenous flora and fauna to be later tested for their nutritional value.

"Thar faces food and nutrition issues since decades. This solution, looking for indigenous food sources, can help. I believe that these plants, vegetables, crops and so on are highly nutritious and can help defeat hunger, if we utilize them properly. Promoting local trees, grasses and shrubs will also contribute to environment protection and preserving ecosystems".

Support for indigenous food sources also come from Dr Raja Shad, Medical Officer at the Basic Health Unit in Bughar, Tharparkar: "Organic food of Thar is healthier than food in the market. People in Thar who utilize the identified species from nature are considered healthier than people who are not consuming indigenous foods."

The project emphasizes the sustainable use of indigenous food resources, naturally adapted to local climate conditions and ecosystems, contributing to improved food security, nutrition and health.

WORLD ENVIRONMENT DAY

PHF WEEKLY BULLETIN - SPECIAL FEATURE

FLORA- exploring indigenous solutions to hunger and malnutrition in Tharparkar, Sindh



For a world without hunger



“Thar faces food and nutrition issues since decades. This solution, looking for indigenous food sources, can help. Promoting local trees, grasses and shrubs will also contribute to environment protection and preserving ecosystems”
- Wali Muhammad

June 05, 2021



WEBINAR ON WORLD ENVIRONMENT DAY

4 JUNE, 2021 | 11:00 AM - 12:30 PM

ECOSYSTEM RESTORATION



MALIK AMIN ASLAM

Environmental ist,
Federal Minister and Adviser to
Prime Minister of Pakistan for Climate Change,
Vice President IUCN



ALI TAUQEER SHEIKH

Water and Climate Change Expert,
Member on the National Climate Change Council,
Member of the External Advisory Group on South
Asian Region Climate Change Action Plan



GUL NAJAM JAMY

Recognized Expert in Energy Efficiency,
Environmental Management
and Institution Development
World Bank, Pakistan



SHAKEEL RAMAY

Political Economist,
Lecturer at Pakistan Foreign Services Academy,
BRI, CPEC and diplomacy



SHARMEEN TARIQ

Director Env. Auditing &
Implementation Programs,
Water & Sustainability Specialist

Pakistan Humanitarian Forum is planning to hold a virtual webinar on the World Environment Day with the theme of Ecosystems Restoration and Management. Experts from media, academia, think tanks, NGOs, UN, government and donors will be invited to share their expert opinion and views on eco system restoration in Pakistan and its effects to avoid the worst impact of climate change in a longer run. The webinar would highlight the need for collective efforts and identify areas where civil society organizations can contribute to Nationally Determined Contributions (NDCs).



PROGRAM AGENDA

11:00 am -11:05 am

Welcome and Opening Remarks

PHF - Excom Chair

11:05 am -11:10 am

Eco-systems restoration in Pakistan

Practitioner

11:10 am -11:20 am

Success stories from the field on community resilience

PHF Members

11:20 am -12:00 am

Eco-systems restoration- perspective of poverty and social protection- Panel discussion

Gul Najam Jamy , Sharmeen Tariq,
Shakeel Ahmed Ramay

12:00 pm -12:10 pm

Eco-systems restoration- Expert talk

Ali Tauqeer Sheikh

12:10 pm -12:20 pm

Remarks by Chairman PHF Board of Trustees

Lt. Gen. Omar Mahmood Hayat (HI)M (Retd.)

12:20 pm -12:30 pm

Closing remarks by Federal Minister and Adviser to Prime Minister of Pakistan for Climate Change

Malik Amin Aslam

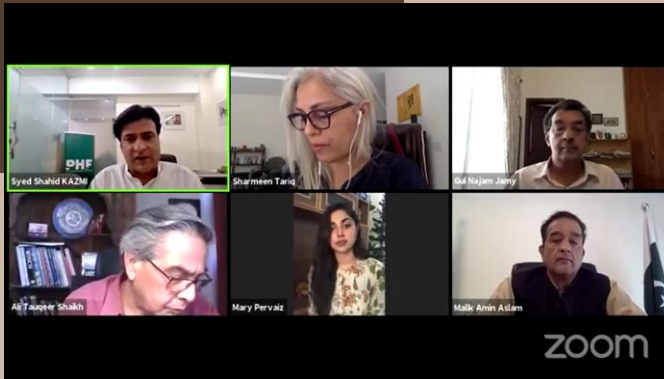
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ZOOM SHOTS OF WEBINAR
JUNE 04, 2021



June 05, 2021

WORLD ENVIRONMENT DAY

PHF WEEKLY BULLETIN - SPECIAL FEATURE



Mehrunnisa, beneficiary of High Efficiency Irrigation System-Oxfam

Photo: Jawad Sharif FI

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