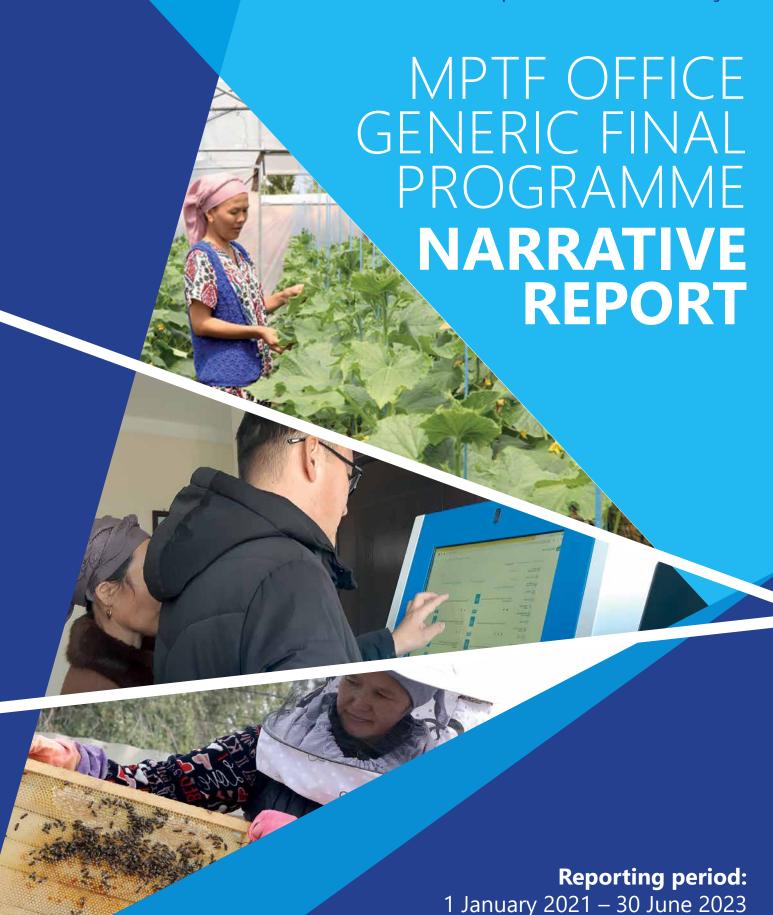






UNDP, UNFPA and FAO Joint Progamme "Unleashing young people's and vulnerable citizens' creativity and innovation by strengthening their adaptive capacity to address the economic and food insecurities in the exposed communities of the Aral Sea region".



Funded by the UN Multi-Partner Human Security Trust Fund for the Aral Sea region in Uzbekistan

Contributors:



Government of the Republic of Uzbekistan



*** * * ***

European Union



Government of Finland



Government of the Republic of Korea



Alwaleed Philanthropies



Government of the Federal Republic of Germany





This Joint Programme is funded by the UN Multi-Partner Human Security Trust Fund for the Aral Sea region in Uzbekistan, which is generously supported by the Government of Uzbekistan, Norway, Finland, the Republic of Korea, the European Union, Alwaleed Philanthropies, and Federal Republic of Germany.



Programme Title: UNDP, UNFPA and FAO Joint Programme "Unleashing young people's and vulnerable citizens' creativity and innovation by strengthening their adaptive capacity to address the economic and food insecurities in the exposed communities of the Aral Sea region"

Programme Number: 00128324

MPTF Office Project Reference Number: 00125229



Participating Organization(s)

Organizations that have received direct funding from the MPTF Office under this programme:

- UNDP
- UNFPA
- **FAO**



Total approved budget as per project document:

USD \$2,100,000

MPTF /JP Contribution by Agency:

- UNDP \$1,740,000
- UNFPA \$180,000
- FAO- \$180,000

Agency Contribution

by Agency (if applicable)

Government Contribution (if applicable)

Other Contributions (donors) (if applicable)

TOTAL: \$2,100,000



Programme Assessment/ Review/Mid-Term Eval Assessment/Review - if applicable please attach

Yes No Date: dd.mm.yyyy

Mid-Term Evaluation Report – if applicable please attach

Yes No Date: dd.mm.yyyy



Country, Locality(s), Priority Area(s) / Strategic Results

Country/Region:

Uzbekistan, the Republic of Karakalpakstan, Bozatau, Kungrad, Muynak districts

Priority area/strategic results:

- **UNDAF Outcome 1:** equitable and sustainable economic growth through productive employment, improvement of environment for business, entrepreneurship and innovations expanded for all;
- **UNDAF Outcome 2:** By 2020 vulnerable groups benefit more from an inclusive, financially sustainable and efficient social protection system;
- **UNDAF Outcome 6:** rural population benefits from sustainable management of natural resources and resilience to disasters and climate change.



- The Ministry of Economy and Finance of the Republic of Uzbekistan (former Ministry of Economic Development and Poverty Reduction)
- The Council of Ministers of the Republic of Karakalpakstan
- Associations of mahallas of Uzbekistan (former Ministry for Support of Mahalla and Senior Generation of the Republic of Uzbekistan)
- Committee on Family and Women's Affairs of the Republic of Uzbekistan
- The International Innovation Centre for the Aral Sea Basin under the President of the Republic of Uzbekistan (IICAS)
- The Ministry of Poverty Reduction and Employment of the Republic of Uzbekistan (former Ministry of Employment and Labour Relations)
- The Ministry of Agriculture of Karakalpakstan
- The Ministry of Construction and Housing and Communal Services in Karakalpakstan
- The Chamber of Commerce and Industry of Uzbekistan
- Business Women's Association
- Youth Agency



Overall Duration (months) 30

Start Date (dd.mm.yyyy)23/12/2020Original End Date (dd.mm.yyyy)30/06/2023Current End Date (dd.mm.yyyy)30/06/2023

Report Submitted By

Name: Ms. Anas Fayyad Qarman

Title: UNDP Resident Representative a.i. in Uzbekistan

Participating Organization (Lead): UNDP

Email address: anas.qarman@undp.org

TABLE OF CONTENTS	5
LIST OF KEY ACRONYMS	6
EXECUTIVE SUMMARY	7
1. PURPOSE	9
2. ASSESSMENT OF PROGRAMME RESULTS	10
I. NARRATIVE REPORTING ON RESULTS	10
II. INDICATOR-BASED PERFORMANCE ASSESSMENT	21
III. EVALUATION, BEST PRACTICES AND LESSONS LEARNED	25
DELAYS IN IMPLEMENTATION	25
CHALLENGES:	25
QUALITATIVE ASSESSMENT:	26
SPECIFIC STORIES	27

AFD	French Development Agency (Agence Francaise de Developpment)
BWA	Karakalpakstan Branch, Business Women's Association of Uzbekistan 'Tadbirkor Ayol'
CDP	Community Development Plan
COVID-19	Coronavirus Disease 2019
EIB	European Investment Bank
FAO	Food and Agriculture Organization of the United Nations
FS	Feasibility Study
GoU	Government of Uzbekistan
ICT	Information and Communication Technology
IICAS	The International Innovation Centre for the Aral Sea Basin under the President of the Republic of Uzbekistan
JP	Joint Programme
MIIT	Ministry of Investment, Industry and Trade of Uzbekistan
MoA	Ministry of Agriculture
MoEF	Ministry of Economy and Finance
MPHSTF	UN Multi-Partner Human Security Trust Fund for the Aral Sea region in Uzbekistan
PB	Project Board
PRA	Participatory Rural Appraisal
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
VCC	Village Council of Citizens
WP	Work Plan

The UNDP, UNFPA and FAO Joint Programme (JP) "Unleashing young people's and vulnerable citizens' creativity and innovation by strengthening their adaptive capacity to address the economic and food insecurities in the exposed communities of the Aral Sea region" addresses the needs of the youth and rural vulnerable groups considering the new reality, reflected in closure of normal life and businesses, through promoting digitalization, focusing on skill building and the jobs of the future, where possible as well as promoting innovative agriculture practices. During the reported period of its implementation (23 December 2020-30 June 2023), the JP accomplished the following achievements:

- 3 vocational training centers were established, equipped and are currently operational where 1120 unemployed youth, women and migrants of Bozatau, Kungrad and Muynak districts had the opportunity to increase professional skills and employability on "Cooking", "Hairdressing services" "Sewing", "Plumbing" and "Information technology";
- 1 startup platform was established, fully designed, renovated and fully equipped. Youth now have access to the innovation platform/environment for development of new business ideas and startups at the Youth Center of Karakalpakstan, 439 youth improved skills and knowledge on start-up development;
- 72 young people increased their capacities and skills on Start-up project development from Internationally recognized expert, 6 winner- teams of the start-up contest received financial support where the 14 engaged young people were able to earn income;10 start-up beginners from Karakalpakstan refined ideas through exchange of experience and information with leading experts in Tashkent;
- 30 unemployed young people from the «youth notebook» of the three pilot districts improved their employability skills as an electrician with a permit to work on electrical installations up to 1000V.;
- **30** unemployed women from the three pilot districts improved their employability skills

- in cooking by participating in the culinary classes;
- 30 unemployed young people from the «youth notebook» of the three pilot districts improved their employability skills and received diplomas as plumbers of the 3rd grade;
- 20 unemployed young people from the «youth notebook» of two pilot districts improved their employability skills in welding with a permit to work as a welder of the 2nd grade;
- **365** rural women from the three districts became empowered through obtained knowledge/skills on business plan development, entrepreneurial and social skills, aspects of gender equality, family planning, and budget management through series of trainings. Out of them 23 women improved family income through realization of business projects supported by the JP;
- Evidence-based research on environmental protection of the Aral Sea region on fostering innovative solutions to rehabilitate and upgrade the existing irrigation system and agricultural land restoration (Feasibility Study) was conducted by AFD with support of the JP; Key findings and recommendations from the feasibility study project include: Priority Commodities: Licorice (Glycyrrhiza glabra) and rosehip (Rosa canina) identified as priority plants for promotion in specific districts of Karakalpakstan due to their suitability for the region. Establishing a protective green belt in the transition zone to the dry Aral Sea bed. Generating incomes through planting productive nontimber forest products (NTFPs) like licorice and rosehip, supporting agroforestry. Enhancing capacities of the Forest Agency and relevant stakeholders on land-use and forest management planning. Efficient project management with a monitored and coordinated system setup. Gender aspects have been specifically identified and addressed to ensure the project benefits both women and men equally at all stages, with gender equality being a cross-cutting objective. Link to the report is planned to be

- shared in April-May 2024 at the website of AFD afd.fr.
- 38 young people improved their food security through engaging in innovative agricultural activities in the three targets districts;
- Young farmers, dehkans, academics, and students increased their capacity on the innovative water saving technology "Buried diffuser" which was tested jointly with IICAS in demonstration plots. The Ministry of Innovation of Karakalpakstan considers opportunities to replicate the practice in Aral Sea region;
- 71 vulnerable households from the 'iron book' increased their income in crop production, horticulture;
- 738 rural population, including youth (572 were women) and 78 extension specialists (18 women) improved income through the conducted thematic trainings in horticulture, livestock development, conservation agriculture, fishery and resource-saving technologies In average 24,000,000 Uzbek soum (1,927 USD) of income were generated annually;
- 6 rural households improved income and food security through the establishment of 3 fruit tree nursery and 3 fishery pond in the pilot districts in average 20,000,000 Uzbek soum (1,639 USD), including in kind fish products, revenue were earned annually.
- **485** rural residents (51% youth) from 15 communities of the pilot districts strengthened social cohesion through engagement in community planning, decision-making and community development plans (CDP);
- 15 CDPs on addressing priority needs were developed using the UNDP methodology on Participatory Rural Appraisal;
- 8,922 rural people (49% women) from 17 communities in Muynak, Kungrad and Bozatau districts have access to stable electricity supply through the supplied 17 transformers with capacity of the 250 kVA;

- 4 projects on improving access to clean drinking water have been successfully completed in 2 healthcare facility (6,698 patients, medical personnel) and 2 schools (510 students, schools personnel) through the constructed water supply networks;
- 2,900 rural people in 3 communities of Bozatau and Muynak districts have access to clean drinking water through the supplied 3 water purification equipment;
- 4,465 rural people (50% women) in VCC "Kazakhdarya" of Muynak district now have access to an improved healthcare facility and service through the conducted renovation work;
- 8,430 rural youth (49% girls) benefitted from free access to internet through established 15 Free Wi-Fi zones in Bozatau, Kungrad and Muynak districts;
- **860** accesses to digitalized public services through the established 3 Infokiosks as of December 2023 data. Potentially rural communities' population of 15,822 people will benefit from the piloted initiatives;
- 5,717 rural residents of Bozatau benefitted from digitalized medical services through the established Electronic polyclinic platform, as of December 2023 data;
- **30** young rural specialists improved their skills/knowledge on ICT and technical digitalization of remote communities.
- **253** school children in target districts had their awareness raised on WASH.
- 1500 school students and teachers in target districts were empowered through use of advanced digital technology in public schools.

Overall, during the reporting period, the project successfully implemented the planned activities and managed to achieve all targets set for 2021-2023. This Joint Programme is funded by the MPHSTF for the Aral Sea region, which is generously supported by the Governments of Uzbekistan, Norway, Finland, the Republic of Korea, the European Union and Alwaleed Philanthropies and the Government of the Federal Republic of Germany.

The ultimate goal of the UNDP, UNFPA and FAO Joint Programme is to address social, health, economic and food insecurities in the most vulnerable communities of the Aral Sea region by increasing efficiency and innovations in agriculture, promoting smart and digitalized communities with favourable infrastructures. and facilitating active labour market initiatives. The Programme enhances community development, empowerment of youth aged 14 to 30, women, and vulnerable groups of people such as disabled, women-headed families, labor migrants, unemployed youth, etc. 27,476 of direct and 155,724indirect beneficiaries have benefitted from the programme activities and results in target districts of the Programme.

The Programme's goal is in line with the government policy that highlights addressing the negative consequences of the Aral Sea environmental disaster as a priority issue. The project seeks to improve the wellbeing of communities affected by the Aral Sea crisis through the following objectives, which fully align with the Multi-Partner Human Security Trust Fund (MPHSTF) Programmatic Framework and Results Matrix as they contribute to addressing the multiple insecurities of people living in one of the most vulnerable districts of Karakalpakstan. The JP has three outcomes:

Outcome 1. Reduce the vulnerabilities of the unemployed, unskilled youth and women and returning migrants through the empowerment and promotion of essential entrepreneurial skills, and youth-led innovations in the region.

Outcome 2. Create an enabling environment for income generation for rural communities (with focus on youth and women) through promoting innovative agriculture practices and piloting new agriculture initiatives.

Outcome 3. Enable the development of smart communities through digitalization, better access to social infrastructure and community engagement with a focus on youth, adolescent and women.

The JP results contribute to the attainment of UNDAF Outcome 1 (equitable and sustainable economic growth), Outcome 2 (vulnerable groups benefit more from inclusive, financially sustainable and efficient social protection system) and Outcome 6 (rural population from sustainable management of natural resources

and resilience to disasters and climate change), while they also mirror the MPHSTF Results Matrix Outcomes.

The first objective has a direct contribution to Outcome 2 of the MPHSTF Results Matrix Outcome (increasing employment and income generation opportunities for local communities), particularly reducing the vulnerabilities of the unemployed, unskilled youth and women, and returning migrants through the empowerment and promotion of essential entrepreneurial skills, and youth-led innovations in the region for over 1120 direct beneficiaries in total. The second objective contributes to the MPHSTF results matrix Outcome 1 (Reducing the stress on local communities due to the deteriorating environmental situation), and Outcome 5 (Improving the living conditions of local populations, with particular focus on vulnerable groups such as women, children and youth) namely promoting innovative agriculture practices and piloting new agriculture initiatives engaging 1196 direct beneficiaries.

The project's goal and objectives are fully aligned with the following policies and strategies of the Government of Uzbekistan for addressing the Aral Sea crisis:

- The State Programme on Development of the Aral Sea Region for 2017-20211, which focuses on improving the environmental and socio-economic situation, the living conditions of the population, and the effective implementation of investment projects to mitigate the environmental disaster in the Aral Sea region;
- The Resolution of the President of the Republic of Uzbekistan2 on 'Measures for integrated socio-economic development of the Republic of Karakalpakstan in 2020-2023'. This resolution focuses on the holistic development of the region through strategies including the improvement of water supply, education, health infrastructure, sport facilities, attraction of investments into the region, creation of industrial production entities, and support of youth and entrepreneurship.

¹ The State Programme on the Development of the Aral Sea Region for 2017-2021, Presidential Decree # 2731, dated 18 January 2017

² Resolution of the President of the Republic of Uzbekistan, # 4889, dated 11 November 2020

I. NARRATIVE REPORTING ON RESULTS

The JP results achieved for the period 1 January 2021 to 30 June 2023 are presented in this report. The JP geographically focuses on the three pilot districts of Bozatau, Kungrad, Muynak in Karakalpakstan, the most affected areas of the ecological crisis districts in the Aral Sea region¹ The Joint Programme addresses the needs of the youth and rural vulnerable groups considering the new realities through promoting digitalization, focusing on skill building and the jobs of the future where possible, as well as promoting innovative agriculture practices.

During this period, the key activities undertaken contributed to the following outcomes of the project:

Outcome 1. Reduce the vulnerabilities of unemployed, unskilled youth and women and returning migrants through the empowerment and promotion of essential entrepreneurial skills, and youth-led innovations in the region (UNDP/UNFPA).

Outcome 2. Create an enabling environment for income generation for rural communities (with focus on youth and women) through promoting innovative agriculture practices and piloting new agriculture initiatives (UNDP/FAO).

Outcome 3. Enable the development of smart communities through digitalization, better access to social infrastructure, and community engagement with a focus on youth, adolescent and women (UNDP).

Under **Outcome 1**, the following results were achieved:

- 3 vocational training centers were established where 1120 youth were able to obtain professional skills and knowledge on sewing, cooking, hairdressing, plumbing and IT; the premises were allocated by local Khokimiyats and all necessary equipment/ items (sewing machine, PCs, beauty salon, plumber model room with tools, cooking items, air conditioners, furniture) delivered to Bozatau, Kungrad and Muynak districts;
- 30 young people from the «youth notebook» learned the theoretical and practical skills of an electrician with the qualification of

- an Electrician with a permit to work on electrical installations up to 1000V. Trainees obtained necessary skills, received diplomas, certificates and 20 of them currently provide services in labor market having potential for being self-employed. In total, 170 migrants, women and youth who were trained on the basis of mono vocational training centers became employed in various sectors of economy;
- 30 unemployed women from the three pilot districts improved their employability skills in cooking by participating in the culinary classes, successful graduates received certificates and currently majority of them established their own businesses and started working as cooks for organizations and companies;
- 30 unemployed young people from the «youth notebook» of the three pilot districts improved their employability skills and received diplomas as plumbers of the 3rd grade. Trainees improved their knowledge on modern plumbing technologies, safety guidelines and current trends in labor markets.;
- 20 unemployed young people from the «youth notebook» of two pilot districts improved their employability skills in welding with a permit to work as a welder of the 2nd grade. Graduates of the courses currently provide their welding services to local population, organizations and construction companies all over the region;
- A startup platform has been created in cooperation with the Agency for Youth Affairs. The necessary equipment was purchased (youth center in Nukus), the premises were renovated and designed in accordance with the latest trends. Over 200 young people of the region benefitted from the platform during 2021-2023.
- 72 youth (18-30 years old) were trained on development of start-up initiatives (environment, IT, social, tourism, agriculture and climate change) by Internationally recognized expert. 17 start-up projects were reviewed, and six start-up projects became

¹ UNDP, UNFPA and FAO Project document

contest winners, the necessary equipment was provided to the winning projects: "Bilim Language School", "Improvement of Water Technology", "Programmers' Combine", "Bookies Audiobooks", "PET-blocks", and "Leather products". Currently, all initiated start-ups are operational.

- 10 start-upers from Karakalpakstan empowered novice startups through direct interactions and exchange of experience with the founders of well-known projects as Book-café, Dekos, Deli, and platforms for innovative ideas such as Astrum IT Academy and IT Park during the organized study tour to the capital city Tashkent.
- 36 female leaders selected on a competitive basis from Muynak, Bozatau and Kungrad districts from among vulnerable groups of the population were trained to become the facilitators to promote gender equality in their communities, strengthening their skills in teamwork, social skills, family planning, family budgeting, entrepreneurial skills and business plan development. In 2021-2022, the 36 community leaders further trained 365 women in their communities (137 in Kungrad district, 116 in Muynak and 112 in Bozatau districts) and transferred the skills and knowledge they have acquired to help them create new entrepreneurship and income-generating family or individual business opportunities. Rural women from vulnerable groups obtained knowledge/skills on business development to lead homebased, family and self-employment initiatives and have additional income opportunities in the three districts.
- A business Fair among women-led business initiatives was organized and 23 women-led business projects became winners of the contest in the spheres of cooking, beauty salon, sewing, etc. and were financed by the programme, which created additional 32 jobs among women and youth.

Manual on start-up development designed for women was developed and published in Karakalpak, Uzbek and Russian, both electronic and hard versions were widely disseminated among youth, NGOs, IT Park and Vocational Training Centers, benefitting to the youth of Aral Sea region.

Under **Outcome 2**, , the following results were achieved:

- 738 rural population, including women and youth improved their knowledge and skills in adopting efficient agricultural practices including horticulture [160], livestock development [165], fishery [166] and conservation agriculture practices [160], as well as water saving technology [87]. In addition, the capacity of local extension specialists [78] were increased through organization of a total of 31 thematic trainings. The obtained innovative knowledge constantly expands an opportunity to improve food security of the rural population in the three districts. 3 fruit tree nurseries (Buzatau, Muynak and Kungrad) and 3 fishery pond (1 in Buzatau and 2 in Muynak) were established in the pilot districts. In average 20,000,000 Uzbek soum (1,639 USD), including in kind fish products, revenue was earned annually.
- 38 rural youth in the three target districts have been engaged in agricultural activities, thanks to technical assistance provided to the three newly established cooperatives: 1 for growing drought-resistant crops (Muynak), 1 vineyard (Kungrad) and 1 vermicompost production (Bozatau). Specifically, the JP delivered equipment such as a Sprayer, Motor pump, Motoblock, Trimmer, Generator, Tarpulin, shovels, sesame seeds, fertilizers, and fences for Muynak; Special greenhouse size 33m² (height 2.6m, width 5.5m, length 6m) for Biohumus production included -12 sets for Bozatau; Grape seedlings, drip irrigation system, and vine-prop for Kungrad. Through these measures, young members of cooperatives improved agro-practices through practical engagement in agrowork and theoretical knowledge shared by experienced farmers in bean production (470 kg harvest), biohumus production (36 tons), etc. which enabled them to earn income 1,545,450/month in average and thus improving their income and food security.

71 vulnerable households (unemployed youth and women) became self-employed in crop production, horticulture after receiving assistance from JP in farming: 33-vegetable growing in hotbed, 3-creation of an orchard; 13- poultry, 9-hydroponics, 4-biohumus production, 2-land moto cultivation, 6-bee farming and 1- wood working equipment. On average 22,000,000 Uzbek soum (1,770 USD) of income were generated annually by households.

Under **Outcome 3**, the following results were achieved:

- 485 rural residents (51% youth) from 15 communities of Bozatau, Kungrad and Muynak districts jointly participated in needs assessment and community development plans (CDP); Jointly identified community needs such as access to improved healthcare services, digital infrastructure, and capacity building in the field of ICT were reflected in the CDPs and addressed accordingly;
- As a result, 15 CDPs on addressing priority needs (access to clean drinking water, stable electricity, improved healthcare services, digital infrastructure, and capacity building in the field of ICT) were developed using the UNDP methodology on Participatory Rural Appraisal by mobilizing the community members including the youth and women, where the needs and priorities of the local population are reflected;
- 8,922 rural people (49% women) from
 17 communities of Muynak, Kungrad and
 Bozatau districts have access to stable
 electricity supply through the supplied
 17 transformers with capacity of the 250 kVA;
- 4 projects on access to clean drinking water have been successfully completed in 2 healthcare facility (6,698 rural patients, medical personnel) and 2 schools (510 students, school personnel) through the constructed water supply networks;
- 2,900 rural people in 3 communities (Bozatau and Muynak districts) improved access to clean drinking water through the supplied 3 water purification equipment;

- 4,465 rural people (50% women) in VCC "Kazakhdarya" of Muynak district have access to improved healthcare facility and service through the conducted renovation work;
- 8,430 rural youth (49% girls) have improved access to internet through the established
 15 Wi-Fi zones in Buzatau, Kungrad and Muynak districts;
- 860 rural people utilized digitalized public services through the established 3 Infokiosks;
- 5,717 rural residents of Buzatau benefitted from digitalized medical services through the established Electronic polyclinic platform;
- 30 young rural specialists improved their skills/knowledge on ICT and technical digitalization of remote communities;
- 1500 school students and teachers in target districts became empowered through use of advanced digital technology in public schools.
- members including the youth and women, where the needs and priorities of the local population are reflected;
- 4,465 rural people (50% women) in VCC "Kazakhdarya" of Muynak district have access to improved healthcare facility through the conducted renovation work;
- 8,430 rural youth (49% girls) have improved access to internet through the established
 15 Wi-Fi zones in Buzatau, Kungrad and Muynak districts;
- 15,822 rural people potentially have access to digitalized public services through the established 3 Infokiosks;
- 21,839 rural residents of Buzatau potentially have access to digitalized medical services through the established Electronic polyclinic platform;
- 30 young rural specialists improved their skills/knowledge on ICT and technical digitalization of remote communities.

A more detailed description of the project's key results and achievements under each output is available below.



Outputs 1.1 Mono-vocational training centers are capacitated and have the tools to provide professional trainings to unemployed youth, women and migrants on the jobs demanded in the local market (UNDP).

During 2021-2023, consultations were conducted with the Ministry of Employment and Labour Relations of Karakalpakstan and district Khokimiyats on the youth employment situation in the Aral Sea region and on priority jobs required in the local job market. Mono-vocational training center premises in three target districts were identified, renovated and fully equipped with items/equipment in five professional spheres which can create an employment opportunity for youth in rural areas such as «Cooking»,

«Plumbing», «Beauty Salon», «Sewing» & «Information Technology». On the basis of the Mono-vocational centers, 1120 young people were trained organized by the rural employment agency and they were provided with employment in three districts.

[30] young people from the "youth notebook" learned the theoretical and practical skills of an electrician and received the qualification of an Electrician with a permit to work on electrical installations up to 1000V.







Photos 1, 2, 3. Youth and women trainings in three professional spheres on the basis of established three monovocational training centers







Photos 4, 5: Practical training on Electrician



Output 1.2. Enabling environment for youth entrepreneurship development created through establishing new businesses and start-up initiatives using innovative and impact-based technologies and solutions (UNDP).

In cooperation with partners such as the Youth Agency, Ministry of Employment and Labour Relations, and Ministry of Innovation of Karakalpakstan, the Programme established the Innovation Start-up Center/platform in Nukus to nurture the next generation of start-uppers thorough mentorship and guidance, ICT

application development, project development, etc. The Youth Agency of Karakalpakstan allocated two rooms for the Start-up platform within the Youth Agency premises in Nukus. The Programme delivered the necessary equipment and items for the Start-up platform (laboratory and training room). The start-up platform

became fully operational from summer 2022 and until now 439 young people were able to strengthen skills and knowledge in start-up project development. Photos of Start-up platform are presented below.

An assessment of the start-up projects among youth was held. Based on results of assessment, [72] young beneficiaries (aged 18-30) from the pilot districts & Nukus city were trained and mentored on start-up project development, managing innovative businesses on environment, ICT, social sphere, tourism, agriculture, and climate change. A contest for the best Start-up projects was organized and the 6 winning teams of the start-up contest

received financial support for the realization of their projects: language school «Bilim», «Improvement of water technology», «Combine of programmers», «Bookies audiobooks», «PET paving stones», «Leather products». Relevant equipment/items were also procured. In order to empower start-up beginners, a study tour was organized for 10 start-uppers from Karakalpakstan to Tashkent to refine their ideas and create favorable conditions for market research. Young start-upers were empowered by direction interactions and discussions with the founders of such projects as Book-café, Dekos, Deli, and platforms for innovative ideas such as Astrum IT Academy and IT Park.







Photos 6, 7, 8: Start-up platform in Nukus



Output 1.3. Home based, family and individual entrepreneurship initiatives supported to provide additional income opportunities to the most vulnerable. (UNDP and UNFPA)

UNFPA in cooperation with the Ministry of Makhalla and Family Support of Karakalpakstan developed training tool such as a special motivational planner for beginner-entrepreneurs in the local language and jointly with local khokimiyats organized series of trainings for selected [36] local facilitators/leaders to promote and expand economic rights of women in pilot districts. Those

leaders further trained [365] women from Bozatau (112), Kungrad (137) and Muynak (116) on improved social skills, increased capacities on family planning, reproductive health, gender equality, business development, family budgeting, business idea evaluation and implementation scheme, marketing and time management methods. Special telegram groups were created between three team







Photos 9, 10,11: Rural women of Bozatau, Kungrad & Muynak are in traininsg, business plans are presented in fair competition

members to discuss ideas, progress, problems and prepare for the Business Ideas Fair.

Business ideas fair-competition was organized in Nukus, where 60 innovative business plans were developed by the trained women and presented for the Review Committee's attention. Based on the evaluation of the selection committee, 23 projects (Bozatau –

11; Kungrad – 4; Muynak – 8) were proposed for further financing. The necessary equipment and items were delivered to beneficiaries and the business initiatives are fully operational.

All these measures are instrumental in empowering women in rural communities and generating additional monthly income of 1,200,000 – 2,500,000 soum.



Output 2.1 Produce evidence-based research on environmental protection of Aral Sea region fostering innovative solutions to rehabilitate and upgrade the existing irrigation system and agricultural land restoration.

UNDP has conducted a joint meeting with EIB and AFD in December 2021 and August 2022 and is also in regular contact with MIIT. The Programme recruited two national experts-researchers on innovative use of land for afforestation who provided their assistance/inputs to Feasibility Study conducted by AFD. FS preliminary results completed in June 2023 though it was supposed to be completed in first half of 2022. However due to the impacts of COVID-19 on the overall workflow, EIB and AFD launched the feasibility study in autumn 2022 and preliminary findings were discussed in summer 2023.

The outcomes of the feasibility study (FS) provide a foundation for facilitating environmental protection in the Aral Sea region and fostering innovative solutions for rehabilitating and upgrading the existing irrigation system and agricultural land restoration. Overall, the outcomes of the FS provide a comprehensive framework for addressing environmental challenges in the Aral Sea region and promoting sustainable development through innovative approaches to land rehabilitation and irrigation system enhancement. Based on results of FS new project is to launch in Aral Sea region addressing challenges on environmental protection, economic development, and resilience building in the region.



Output 2.2 Ensure food security for youth and rural population by transforming innovative knowledge and skills in adopting efficient agriculture practices (FAO).

Study and monitoring for mapping the target audience institutional and individual capacity gaps in horticulture, crop diversification, fishery and livestock development were conducted in the target districts.

In cooperation with local Khokmiyats of the pilot districts, ICBA, the Research Institute of Fisheries, and the Association of Women in Agricultural Sector, innovative knowledge and skills were transferred to rural youth and local farmers in adopting efficient agriculture practices namely [160] rural people improved knowledge and skills in innovative methods of horticulture, [165] on livestock development, [160] people on conservation of agriculture practices, [166] rural inhabitants improved skills and knowledge on fishery, [87] on water saving technology and [78] on increasing the capacity of local extension







Photos 12, 13, 14: Beneficiaries of pilot dsitricts are otainining knowledge and skills in efficient agriculture practices.







Photos 15, 16, 17: Beneficiaries of fruit tree nurseries and fishery ponds.

specialists through organization of total 31 thematic trainings. These measures contribute to increasing the efficiency and productivity of agro-practices as well as improving income and food securities of beneficiaries. For instance, beneficiary Sadiq Dyusenbaev has established fishery pond in Bozatau and earned 18.8 million soums from fish sales in 2022.

Additionally, technical support to the households in establishing nurseries and

fishery ponds through procurement of the necessary equipment/machinery has been provided. So, in total three fruit tree nurseries were established in Ali-Aul VCC of Muynak district, Adebiat VCC of Kungrad district and Buzatau TCC of Buzatau district. Moreover, 3 fishpond was established: 1 in Aspantay village of Buzatau district and 2 in Muynak district AKVA PROM ARAL LLC and "MUYNAK MEX" LLC.

\$\$\$\$

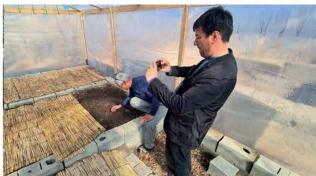
Output 2.3 Better job opportunities or rural youth by engaging them in the agriculture sector (UNDP)

The Programme identified needs of rural youth who wished to be engaged in agricultural work and considered possibilities to involve youth into youth cooperatives, small farm enterprises as an employment scheme for rural youth. As result, the Joint Programme provided technical support to the three newly established youth cooperatives: 1 for growing drought-resistant crops ("Borzu Hoja" cooperative in Muynak), 1 vineyard ("Mahmudov Jamshid" cooperative in Kungrad) and 1 vermicompost production ("Gulleneber Bozatau" cooperative in Bozatau). Specifically, the JP delivered equipment such as Sprayer, Motor pump, Motoblock,

Trimmer, Generator, Tarpulin, shovels, sesame seeds, fertilizers, fences for Muynak; Special greenhouse size 33 m² (height 2.6 m, width 5.5 m, length 6m) for Biohumus production included – 12 sets for Bozatau; Grape seedlings, drip irrigation system, vine-prop for Kungrad. Through these initiatives, [38] rural young people in the three targets districts have been engaging in agricultural work, increasing their skills and improving their income.

Technical support to the International Innovation Center for Aral Sea Basin under





Photos 18, 19: Young people engaged in agriculture in youth cooperatives in Kungrad and Bozatau districts.





Photos 20, 21: Demo plot on testing "Buried Diffuser" water saving technology in IICAS.

the President of the Republic of Uzbekistan in establishing a training facility on conservation agriculture practices completed. That enabled to create demonstration plots on innovative resource-saving methods of agriculture, particularly the irrigation technology «Buried diffuser». Tests in demonstration plots were successfully conducted between March to September 2022. Two irrigation technologies, Buried Diffuser and Drip Irrigation were tested. Results have shown that the Buried Diffuser technology can save up to 20% of water resources and up to 55.8% (16 t. vs 7 t.) of more harvest than Drip Irrigation. Moreover,

results of the pilot site data showed efficiency of the buried diffuser was 56% in terms of water saving and crop productivity higher compared to that of drip irrigation system despite of the cost is higher as well (31,09 mln vs 13.5 mln UZS). Findings and results were shared among youth, farmers, dehkans, and academics in the seminar organized in September 2022 and published booklet with findings were disseminated to beneficiaries. Localization and replication of such technology is being considered by the Ministry of Innovation of Karakalpakstan.



Output 2.4 Support vulnerable groups (with focus on youth and women) in self-employment through promoting innovative technologies in crop production, horticulture and aquaculture (UNDP)

In cooperation with local Khokimiyats of the pilot districts, [71] vulnerable households identified from the "Iron book" who wanted to engage in agricultural activities and household plots. All 71 vulnerable households received assistance in farming: 33-vegetable growing in hotbed, 3-creation of an orchard; 13-poultry, 9-hydroponics, 4-biohumus

production, 2-land moto cultivation, 6-bee farming and 1- bandsaw. The Programme support contributes to promoting food security among family members of selected households. Beneficiaries obtained valuable skills and knowledge on efficient horticulture and agro-practices through trainings organized by FAO.







Photos 22, 23, 24: Beneficiaries from vulnerable groups engaged in agro-practices at household plots in target districts.



Output 3.1 Empowered vulnerable remote communities through use of advanced digital technology

A needs assessment on digitalization was conducted among schools in rural areas. The results of the needs assessment have shown the need for modern ICT equipment, therefore the Joint Programme provided technical support to 4 schools in pilot districts. In order to empower vulnerable communities through the provision of access to advanced digital technology,

schools # 4 and 17 in Muynak, school # 3 in Bozatau, school # 4 in Kungrad districts were provided with modern ICT (PCs, interactive board interactive projectors, projectors, screen for projectors, multifunction printers) which enabled [1500] school children and teachers to have better access to the internet and digital education.





Photos 25, 26: Schools have access to internet and digital education.



Output 3.2 Strengthened social cohesion through youth engagement in community planning, decision-making and rehabilitation processes

The assessment of priority needs of 15 communities of Muynak, Kungrad & Bozatau districts with the participation of [485] residents was carried out. The results of the assessments have shown the need for access to clean drinking water, stable electricity supply, improved health services, digital infrastructure and capacity building in the field of ICT and, accordingly, in these areas. [15] Community development plans were developed, initiative groups with youth participation were created.

As a result [8,922] rural people have access to stable electricity supply; 4 projects on access to clean drinking water were successfully completed in 2 healthcare facility [6,698] and 2 schools [510] through the constructed water supply networks; [2,900] rural people have access to clean drinking water through the supplied water purification equipment; [4,465] rural people (50% women) in VCC "Kazakhdarya" of Muynak district have access to improved healthcare facility through the







Photos 27, 28, 29: Transformers 250 kVA (17 communities) in Bozatau, Kungrad and Muynak districts.







Photos 30, 31, 32: Access to clean drinking water in healthcare facilities in Bozatau and Kungrad districts.







Photos 33, 34, 35: Access to clean drinking water in rural areas (2 communities) in Bozatau and Muynak districts.







Photos 36, 37, 38: Free Wi-Fi zones (15 communities) in Bozatau, Kungrad and Muynak districts.







Photos 39, 40, 41: Infokiosks in pilot districts, rural people have access to digitalized public services.







Photos 42, 43, 44: Electronic polyclinic platform, rural residents have access to digitalized medical services in Bozatau district

conducted renovation work; [8,430] rural youth (49% girls) have access to internet through the established 15 Wi-Fi zones in Bozatau, Kungrad and Muynak districts; [15,822] rural people have access to digitalized public services through the established 3 Infokiosks; [21,839] rural residents

of Bozatau benefit from digitalized medical services through the established Electronic polyclinic platform. [30] young rural specialists improved their skills/knowledge on ICT and technical digitalization of remote communities.



Output 3.3 Strengthened community capacities and facilities to respond to the pandemic and ensure longer-term recovery in cooperation with UNICEF led Joint Programme.

A rural healthcare facility was renovated in the remote village "Kazakhadarya" of Muynak, a heating system was installed, access to hot water assured and WASH standards such as access and water quantity, water quality, water

facilities, appropriate and adequate toilet facilities, collection and disposal, drainage work were achieved. [4,465] village residents (50% women) have access to improved healthcare facility and services.







Photos 45, 46, 47: Rural healthcare facility in Kazakhadarya VCC of Muynak. People have access to improved healthcare services.

II. INDICATOR-BASED PERFORMANCE ASSESSMENT

	Achieved Indicator Targets	Reasons for Variance with Planned Target (if any)	Source of Verification
Outcome 1. Reduce the vulnerabilities of unemployed, unskilled youth and women and returning migrants through the empowerment and promotion of essential entrepreneurial skills, and youth-led innovations in the region (UNDP, UNFPA)			Programme training reports/analytical report
Indicator: # of youth (disaggregated by sex) strengthened their skills through access to professional education centers/points and engaged in entrepreneurship activities Baseline: N/A Planned Target for 2023: 1000	1120		
Output 1.1 Mono-vocational training centers are capa have tools to provide professional trainings to unemp women and migrants on the jobs demanded in the loc	loyed youth,		
Indicator 1.1.1 # of youth equipped with necessary technical skills have prepared Baseline: 37 Planned Target for 2023: 90	110		Programme/ training/ analytical reports
Indicator 1.1.2 # of youth employed (informal/formal) Baseline: 54 Planned Target for 2023: 50	170		National statistics/ analytical reports
Indicator 1.1.3 # of skill building platforms enhanced their professional portfolio Baseline: 0 Planned Target for 2023: 3	3		Programme/ MoELP/ analytical reporting
Output 1.2 Enabling environment for youth entrepren development created through establishing new busine start-up initiatives using innovative and impact-based and solutions.	esses and		
Indicator 1.2.1 # of youth enhanced their skills through mentorship and start-up initiatives Baseline: 50 Planned Target for 2023: 72	439		Programme MoELP/ Youth Agency/ training reporting/ Quarterly/ semiannual progress reports
Indicator 1.2.2 # of youth led innovation club established Baseline: 0 Planned Target: 1	1		
Indicator 1.2.3 # of start-up projects developed Baseline: 0 Planned Target for 2023: 1	6		
Indicator 1.2.4 # of knowledge-based jobs created Baseline: 0 Planned Target for 2023: 14	14		
Output 1.3 Home based, family and individual entrepreneurship initiatives supported to provide additional income opportunities to the most vulnerable.			Project reports, pre-
Indicator 1.3.1 # of women enhanced their knowledge on home-based entrepreneurship Baseline: 235 Planned Target for 2023: 360	365		post assessment reports of trainings, registration records of established business entities
Indicator 1.3.2 # of family-based and individual entrepreneurships established Baseline: 27 Planned Target for 2023: 18	23		
Indicator 1.3.3 #of community leaders trained in business facilitation skills Baseline: 0 Planned Target for 2023: 34	36		

	Achieved Indicator Targets	Reasons for Variance with Planned Target (if any)	Source of Verification
Outcome 2. Create an enabling environment for income generation for rura (with focus to youth and women) through promoting innovative agriculture piloting new agriculture initiatives (FAO, UNDP)			Programme training reports/analytical report
Indicator: # of households have increased their income generation opportunities through adaptation of innovative technologies agricultural practices Baseline: N/A	221		
Planned Target for 2023: 200			
Output 2.1 Produce evidence-based research on environmental protection of Aral Sea region fostering innovative solutions to rehabilitate and upgrade the existing irrigation system and			TOR and Research
agricultural land restoration.	1		Plan
Indicator 2.1.1 # of research work conducted Baseline: 1 Planned Target for 2023: 1	1		Round Table Report
Output 2.2 Ensure food security for youth and rural population by transforming innovative knowledge and skills in adopting efficient agriculture practices (FAO)			
Indicator 2.2.1 # of capacity building activities delivered Baseline: 55 Planned Target for 2023: 15	25	To achieve better understanding and receive more information of participants, we focused on inviting maximum 25 participants to each training. Therefore, the number of indicators has become more than was planned.	Training Reports Monitoring visits Extension Service Center registration documents
Indicator 2.2.2 # of people improved knowledge and skills in horticulture Baseline: 0 Planned Target for 2023: 150	160	More rural population were interested in the trainings	Progress Annual and Quarterly Progress Reports
Indicator 2.2.3 # of people improved knowledge and skills in aquaculture Baseline: 0 Planned Target for 2023: 150	166	More rural population were interested in the trainings	
Indicator 2.2.3 # of people improved knowledge and skills in livestock development Baseline: 0 Planned Target for 2023: 150	165	More rural population were interested in the trainings	
Indicator 2.2.4 # of people improved knowledge and skills in conservation agriculture practices Baseline: 0 Planned Target for 2023: 150	160	More rural population were interested in the trainings	
Indicator 2.2.5 # of people adopted new practices on water saving technologies, hotbed production Baseline: 5904 Planned Target for 2023: 75	87	More rural population were interested in the trainings	
Indicator 2.2.6 # of extension service centers representatives enhanced their capacity in providing extension services Baseline: 10 Planned Target for 2023: 36	78	During organization of trainings, JP observed that more people than it was planned wish to increase capacities. JP provided access to additional participants to attend trainings. Therefore, total number of trainees increased than planned.	

	Achieved Indicator Targets	Reasons for Variance with Planned Target (if any)	Source of Verification
Indicator 2.2.7 # of fruit tree nursery established Baseline: 3 Planned Target for 2023: 2	3		
Indicator 2.2.8 # of fishery ponds established Baseline: 0 Planned Target for 2023: 2	3		
Output 2.3 Better job opportunities for rural youth by engaging them in agriculture sector			
Indicator 2.3.1 # of youth cooperatives established Baseline: 10 (pasture cooperatives) Planned Target for 2023: 2	3		Cooperative registration documents
Indicator 2.3.2 # of youth engaged in agriculture through the employment scheme Baseline: 47,830 Planned Target for 2023: 75	139		Monitoring visits, Progress Annual and
Indicator 2.3.3 # of households improved income generation opportunities Baseline: 0 Planned Target for 2023: 75	139		Quarterly Progress Reports MOUs and transfer acts with beneficiaries
Indicator 2.3.4 # of farm enterprises improved technical capacities Baseline: 0 Planned Target for 2023: 3	3		
Output 2.4 Support vulnerable groups (with focus to youth and women) in self-employment through promoting innovative technologies in crop production, horticulture and aquaculture			Training Donorte
Indicator 2.4.1 # of women improved capacities in agriculture Baseline: 3182 Planned Target for 2023: 60	89		Training Reports Monitoring visits MOUs and transfer acts with beneficiaries
Indicator 2.4.2 # of women engaged in homestead land production Baseline: 3 Planned Target for 2023: 60	89		
Indicator 2.4.3 # households improved income generation opportunities Baseline: 3 Planned Target for 2023: 55	71		
Outcome 3. Enable the development of smart communities through digitalization, better access to social infrastructure and community engagement with focus on youth (UNDP)			Monitoring visits
Indicator 3.1 # of rural internet users have access to digitalization tools Baseline: 0 Planned Target for 2023: 600	1,500		
Indicator 3.2 # of population has increased access social services (drinking water, renovation of health care facilities and electrification) in target communities Baseline: 0 Planned Target for 2023: 1200	22,321		

	Achieved Indicator Targets	Reasons for Variance with Planned Target (if any)	Source of Verification
Output 3.1 Empowered vulnerable remote communities through use of advanced digital technology			
Indicator 3.1.1 # of public organizations Baseline: 0 Planned Target for 2023: 3	19		Progress Annual and Quarterly Progress Reports
Indicator 3.1.2 # of trained specialists Baseline: 0 Planned Target for 2023: 18	30		Training Reports Visit reports
Indicator 3.1.3 # of schools connected to Internet Baseline: 0 Planned Target for 2023: 3	4		
Output 3.2 Strengthened social cohesion through youth engagement in community planning, decision-making and rehabilitation process			Training Reports
Indicator 3.2.1 # of trained young people Baseline: 860 Planned Target for 2023: 60	90		Training consultant report Number of CDP Transfer acts with beneficiaries
Indicator 3.2.2 # of conducted workshops Baseline: 36 Planned Target for 2023: 6	15		
Indicator 3.2.3 # of CDPs Baseline: 36 Planned Target for 2023: 6	15		
Indicator 3.2.4# of social projects Baseline: 36 Planned Target for 2023: 10	23		
Output 3.3 Strengthened community capacities and facilities to respond to the pandemic and ensure longer-term recovery in cooperation with UNICEF led Joint Programme			
Indicator 3.3.1 # of trained school children on WASH Baseline: 0 Planned Target for 2023: 200	253		Training report
Indicator 3.3.2 # of schools provided with drinking water Baseline: 8 Planned Target for 2023: 2	2		Visit reports

III. EVALUATION, BEST PRACTICES AND LESSONS LEARNED

Delays in implementation

The Programme has not experienced any delay of activities, except some delay in Output 2.1.(Produce evidence-based research on environmental protection of Aral Sea region fostering innovative solutions to rehabilitate and upgrade the existing irrigation system and agricultural land restoration). The delay is caused mainly by situation related to COVID-19 and relevant organizations who was supposed to be engaged in feasibility study started at later stage (Autumn 2022) than expected. However, FS preliminary results completed in June 2022.

Challenges:

- Presidential school was moved to the building of the Kungrad district mono-centre. In this regard, the issue of replacing of the vocational monocenter to another building was considered. JP was about to initiate reallocation of provided equipment to the different building. Such kind of situation forced to temporary stop organization professional trainings in the premise. After 3 months JP was informed by the Khokimiyat that the mono-centre will stay in the same building without any move;
- Prices of some of the equipment and items increased. JP re-allocated additional funds saved from other activities funds to meet objectives.

Mitigation and adaptation measures taken by the Programme

The Programme team conducted negotiations with Kungrad khokimiyat to allocate another premise for vocational mono-center in the district. As result relevant premise at the industrial college of Kungrad was allocated. However, after 3 months Kungrad Khokimiyat informed the JP that it cancelled its decision to re-allocate mono-centre to different building.

Lessons learned:

- Frequent staff rotation in the Khokimiyats in target districts takes place. Newly appointed Khokimiyat staff are usually unaware of the Joint Programme and they periodically need to be informed and updated on the Joint Programme objectives and results. The Project team periodically organizes meeting with representatives of the Khokimiyats, including new appointees, to deliver information on the project and its achievements;
- There were many development plans/ projects which were included in state programme and announced for the implementation by the Government in remote areas. However, in reality JP observed that there were many pending projects. Such kind of situation created some uncertainty for Joint Programme and JP had to reconsider site selection.

Best practices:

- The Joint Programme applies an integrated and holistic approach in supporting the youth, migrants, vulnerable women in socioeconomic and environmental needs in the three pilot districts. The coordinated joint efforts by UNDP, UNFPA and FAO allow for addressing multiple insecurities of the population and have bigger impact on their lives;
- The Joint Programme implements new approaches in supporting the youth of the region through the creation of vocational mono-centers, where youth can be trained on professional skills and receive certificates on specialties which are not covered by other mono-centers. This measure greatly helps youth to find a job and improve income security.
- The Joint Programme engages community youth in establishing/creating community development plans and management,

planning and implementation of projects that are most appropriate from the views of the young generation. The current approach helps to identify specific needs of youth and address them accordingly.

- The Joint Programme piloted Free Wi-Fi zones in 15 remote rural communities where all rural residents including youth and women have access to the free internet service;
- The JP established an electronic polyclinic in Bozatau district, which is the first e-policlinic in rural areas, which creates convenience for the rural population in accessing electronic medical services;
- The Joint Programme initiated and tested the innovative irrigation technology "Buried Diffuser" in the Aral Sea region. Test results have shown higher efficiency of the technology compared to Drip Irrigation. Results were disseminated among farmers, dehkans, students and academics.
- The JP supports the community youth and vulnerable women in attaining knowledge and skills in integrating the best innovative technologies in the agriculture sector, including the introduction of water saving technologies, crop diversification,

horticulture and hotbeds development that are proven to be successful in the agro sector in worldwide.

Qualitative assessment:

Overall, the Joint Programme completed all planned activities for the 2021-2023. Some results were achieved on time, some results were achieved earlier than expected. The project established sound partnerships with key stakeholders at regional, district and grassroot levels, and local communities have been fully engaged in implementing the activities. Through its interventions at every stage, the project promoted gender mainstreaming principles. When organizing initiatives, committees or panels, the project always ensured that the voices of the most vulnerable groups of the population, including those of women, youth and the elderly, were all represented and heard. Through community mobilization and target audience identification for entrepreneurship support and skill-building initiatives, the project engaged women and youth in communities. Since One UN model is a mandatory approach, JP fully promoted it through smooth coordination between UNDP and UNFPA and FAO, in terms of joint planning and implementation of activities.

Start-up platform and enhanced skills help to materialize new start-up project "Bilim"

As we all know, the COVID-19 pandemic played a huge role in the more widespread use of various platforms that allow us to perform various functions for both study and work remotely. "The idea of creating a unified educational platform for the residents of our country came during time of lockdown" said Gulnara, "Most of our population does not speak foreign languages: English and Russian. I asked myself why there is no single educational platform adapted for the needs of our region".

Gulnara realized that to teach particular useful skills through the platform she needs to provide educational information in Karakalpak and Uzbek language. "That's how the idea of creating the "Bilim" project which provides express language and programming courses for different professions like teachers, doctors and entrepreneurs in their native language" she said.

Gulnara participated in several contests like Ideathons, Hackathons and Incubation with her idea, but she did not manage to succeed at the time. "Yes, I had failures, but I decided not to give up and my interests and motivation to work on self-development and improvement of the project only grew. The last stage of the Incubation contest was well remembered by me, and thanks to this, I learned about the UNDP's Startup Initiative. During the three months of training, I have learned the basic skills necessary to launch my own startup project", she said. It was a Startup Initiative within the framework of the

UNDP, UNFPA and FAO's "Unleashing young people's and vulnerable citizens' creativity and innovation by strengthening their adaptive capacity to address the economic and food insecurities in the exposed communities of the Aral Sea region" Joint programme. After the training courses, she gained new entrepreneurial and other useful skills for creating startup platform "Bilim".

Overall, 16 teams took part in the competition and Gulnara's team of 4 people won the startup contest with their "Bilim" educational platform. The team consisted of a project leader – Gulnara Joldasbaeva, a programmer – Dauletyarov Islambek, a Russian language teacher – Abdirov Amir and an English teacher – Vaisi Abdul-Aziz. "In our team we have specialists who are engaged in teaching and programming and I should note that Davletyarov Islambek successfully launched his other application project - "Qasimda" - a single multifunctional information platform", she said.

Together with her colleagues on the project, they developed a training programme for different professions, adapting them for the local population. In the process of work, Gulnara said she delved even deeper into the methods of teaching foreign languages, and as a student of the Department of Russian Language and Literature, she identified a problem related to the teaching methodology, more precisely about its irrelevance today. The analysis conducted by her team and the survey among the target





Photos 48, 49: Gulnara is presenting her project to prepare for the pitching and discussing the project with her teammates at the newly established startup platform.





Photos 50, 51: Gulnara is sharing with new startuppers her path to winning the startup contest and receiving co-financing from UNDP.

audience also confirmed this problem and she believes that the platform they created can be one of the solutions to this problem.

From January to March 2022, with the support of the UNDP, UNFPA, and FAO's Joint Programme, which is funded by the Multi-Partner Human Security Trust Fund for the Aral Sea region of Uzbekistan, and in partnership with the Agency for Youth Affairs in Karakalpakstan and in close cooperation with the territorial department

of the Ministry of Innovative Development of the Republic of Karakalpakstan, a training course on the basics of entrepreneurship and the stages of launching startup initiatives for young people aged 18–30 from Kungrad, Muynak, and Bozatau was organized. 72 participants of the training studied the basics of implementing innovative ideas and startup projects in such areas as information technology, economics, social initiatives, tourism, and regional climate change.

Blossoming Hope: Aral Sea's Dried Bed Unleashes Healing Power through Beekeeping

Have you ever dreamed of cultivating your own apiary amidst an environmental disaster like the Aral Sea region?

At first glance, it seems improbable due to the harsh conditions, especially the lack of flowering plants crucial for beekeeping. However, a unique feature distinguishes the Aral Sea's surreal landscapes – a diverse

vegetation cover fostering the growth of medicinal, forage, fruit, tannin, essential oil, and bee plants.

Venturing into the Muynak district, near the dried-up Aral Sea bed and its haunting ship cemetery, tourists are drawn to the area. It's here that our beekeeper heroines, like Zamira Zhaulybayeva reside.



Photos 52: Desert flowers.

► A Life-changing discovery

Zamira's day begins with the fragrant, rich taste of honey collected by bees from wild medicinal plants in the Aral Sea desert landscapes. This honey, a life-changing discovery, becomes the main treat on her family's table. Her family, aware of the honey's healing properties, sees it as a panacea for many diseases.

The story traces back to 1997 when Zamira's husband, Zhenis Boldykov, assisting beekeepers in Bukhara, developed a fascination for beekeeping. The family's dream of a bee apiary took root, and by 2022, within UN Joint programme (UNDP, UNFPA and FAO) funded by the UN Multi-Partner Human Security Trust Fund for the Aral Sea region in Uzbekistanfor Human Security, Zamira's family received the

necessary equipment for beekeeping in the Aral Sea region.

Despite the challenges of a harsh climate, Zamira's family perseveres, leaving most honey to help the bees adapt. Zamira's dedication extends beyond beekeeping to plant-growing, contributing to the unique fodder base for bees. The honey obtained from desert plants, including sandy Acacia and Cistanche, possesses a special flavour and aroma, serving as a natural medicinal collection.

Zamira envisions promoting the unique honey of the Aral Sea globally, capitalizing on Muynak's popularity among tourists. She believes that the natural bee product, collected in this extraordinary region, is a step into the future for environmental sustainability.







Finding hope in tiny bees

Another beekeeper, Alimash Myrzayeva, faced life challenges, including a terminal brain cancer diagnosis. The Joint Programme provided an opportunity for her to venture into beekeeping. The initiative not only helped her rebuild her life but also provided her with a newfound purpose and a way to combat her illness.

She did not immediately decide to participate in the project, «my husband nudged me into it, fortunately he had the experience in the family,» she recalls. Then Alimash successfully turned over a new leaf of her fascinating life. «These amazing tiny creatures literally cured my soul, allowed me to forget about my illness.» recalls Alimash.

Alimash's journey into beekeeping, guided by experienced beekeepers, resulted in successful honey extraction, highlighting the potential of the Aral Sea region. Like Zamira, Alimash aims to develop beekeeping in the region, leveraging its rich flora. The honey they produce is not just a treat but a form of prevention against diseases.

In conclusion, Zamira and Alimash, along with other participants in the Joint Programme, emerge as trailblazers in beekeeping, harnessing the rich flora of the Aral Sea region. As the story unfolds, it becomes evident that honey from medicinal plants could be the panacea for many diseases, offering hope and prosperity to the community, the region, and the country.

Note: The analysis¹ in the Aral Sea region revealed that 161 species of medicinal plants grow in the Amu Darya delta, 85 species of

medicinal plants grow on the Ustyurt Plateau. The data has not been updated in recent years.

► Albina Maksetbaeva is a 22-year-old young mother and poultry farmer from Kungrad

After graduating from medical college in 2020, she started a family, but she still couldn't find a job. Albina did not give up and decided to take up her favorite hobby poultry farming.

She developed an interest in poultry farming from her mother during college. "At that time, she was just starting to get involved in this business. After classes, we often spent time with her and the chickens; these were those times that brought back warm memories in our souls. The funniest moment was when she and I were running after chickens and it made us laugh a lot when we were new," says Albina with a smile on her face.

In an incubator with a solar panel received within the framework of a joint UNDP UNFPA and FAO programme financed by the Multi-Partner Human Security Trust Fund for the Aral Sea region in Uzbekistan, Albina placed 300 eggs in March and in February her family received income that supports her family.

Thanks to her perseverance and dedication to her work, Albina has become a successful entrepreneur and an inspiration to other young mothers. She not only provides for her family, but also creates jobs in her hometown.

Her poultry farm has become a popular place to buy fresh and natural products.

Albina's commitment to sustainable farming has become a shining example of how she can make a difference in the environment by using a solar panel incubator to reduce her carbon footprint, thereby inspiring others to adopt renewable energy practices.

But most importantly, Albina proved that age and family responsibilities are not an obstacle to achieving success. She showed that courage, determination and love for one's work can lead to good results.

Today Albina continues to develop her poultry farm and strives to become a leader in her industry. She is also actively involved in educational programs and provides advice to others interested in getting into poultry farming.

The story of Albina Maksetbaeva is a story about how courage, perseverance and love for one's work can lead to success. Her story inspires young entrepreneurs and demonstrates that no matter the circumstances, you can achieve your goals and create a prosperous future for yourself, your family and the environment.







¹ https://www.ijsr.net/archive/v10i2/SR21129103316.pdf https://scientists.uz/uploads/202203/D-20.pdf

► Fostering Digital Literacy in Kazakhdarya, Muynak district through Empowering Local Youth and Residents

In today's rapidly evolving digital era, our daily lives are intertwined with digital products, playing a crucial role in driving the country's economy, as demonstrated by global practices. To stay abreast of the changing landscape, enhancing proficiency in digital platforms and computer literacy is paramount, particularly for individuals residing in remote and underserved communities.

One such community is Kazakhdarya in the Muynak district, where residents lack access to essential public services within their locality. Consequently, they must travel considerable distances to the district center for such services, often encountering challenges due to the area's isolation. Today, we delve into the plight of rural residents in this community through the perspective of Manas Nazarbaev, a local and ICT specialist who leads the youth in Kazakhdarya.

The internet and digital platforms have become indispensable in our lives, facilitating tasks like bill payments, financial transactions, and accessing public services. The digital age has permeated all corners of the globe, offering swift and convenient solutions that eliminate the need for physical presence at government institutions, thereby saving time, effort, and resources. According to Manas, even basic transactions like withdrawing funds pose difficulties for residents, underscoring the necessity for accessible terminals and digital platforms to enhance

the lives of rural inhabitants in vulnerable regions like those near the Aral Sea.

Manas, driven by a passion for computer technologies since a young age, recognized the vast opportunities in ICT and committed himself to sharing this knowledge with the youth in his community. By imparting skills in software platforms, he aims to equip them for remote work and financial independence, thereby enhancing their quality of life.

Reflecting on his journey, Manas recalls his initial shock at the dilapidated state of the Mahalla building, highlighting the lack of repairs and digital infrastructure. Realizing that internet and computer equipment were essential for his mission, he faced a seemingly insurmountable obstacle. However, the intervention of the UNDP, UNFPA, and FAO Joint Programme, supported by the Multi-Partner Trust Fund, brought a ray of hope by enabling the digital transformation of remote communities, including Kazakhdarya.

Thrilled by this opportunity, Manas was further motivated by the training sessions conducted under the Joint Programme to enhance digital literacy. These sessions not only filled the gaps in his knowledge but also equipped him with new skills.

As part of the programme, Infokiosk equipment was installed at the post office, providing access to over 370 public services, while a Wi-Fi zone was established in the Kazakhdarya community premises, ensuring constant internet connectivity.







Photos 57-59: Manas Nazarbaev helps rural resident to use Infokiosk and access Free Wi-Fi in Kazakhdarya community premise.

► Finding beauty in business: Supporting women entrepreneurs in Uzbekistan

Ziynegul's eyes light up as she carefully flips through her family album. «That's me,» she says, «I think I was 8 years old, and I was playing with my dolls, fixing their hair.» Little did she know that a childhood pastime would one day lead her to become a successful business owner in Bozatau district in northwestern Uzbekistan. The region, located in the northern part of the Republic of Karakalpakstan, which was once thriving due to the Aral Sea's role in its economy and infrastructure, has since faced a multitude of problems with the sea drying up.

Ziynegul is one of the winners of a business fair funded under the joint programme of UNDP, UNFPA and FAO with the financial support of the UN Multi-Partner Trust Fund for Human Security for the Aral Sea region in Uzbekistan. With this support, Ziynegul has been able to turn her childhood passion into a thriving business that not only supports her family but also creates opportunities for other women in her district.

In March 2022, Ziynegul, along with 300 other women from the Bozatau, Kungrad, and Muynak districts, was trained in entrepreneurial skills by UNFPA trainers. At the end of the trainings, Ziynegul's business plan for beauty salon services received seed funding of USD 3,390. UNDP donated equipment and accessories for her salon, allowing her to expand and improve the range of services provided, attract more customers, and hire additional staff. Today the salon provides a variety of services such as make-up, pedicures, manicures, and hairdressing, serving 10 to 12

clients a day, and employing six women, with plans to expand even further.

"These were very interesting and productive trainings that helped me, and many women gain confidence, master essential business and planning skills such as business development, family budgeting, business idea evaluation and implementation, marketing and time management methods. I made many friends, and what is important, we constantly supported and still support each other, sharing experience and advice," says Ziynegul.

"Fifteen years ago, I first started working in a beauty salon as an apprentice. It was very difficult, because required items and equipment were not easily available and I didn't have the skills and knowledge it takes. It didn't always work out the way I wanted. There were moments when I wanted to quit everything, but I did not give up and continued to work hard on myself" recalls Ziynegul.

These days Ziynegul is thinking of expanding her business and is currently looking for a new building, where in addition to a beauty salon service, she could offer rental services for wedding dresses. She has also trained 22 young girls in hairdressing and makeup and aims to train more of girls in her district, giving them new hopes.

Ziynegul's story is one of resilience, determination, and support. Leading a thriving business, she also finds courage from having a supportive husband and family, whose livelihoods have also improved. For Ziynegul now, the sky is the limit.







Photos 60-62 Zieynegul is one of a handful of women entrepreneurs, turning her childhood dream into a thriving beauty business with the support of the Joint Programme