





Addressing Climate Change Risks on Water Resources and Food Security In the Dry Zone of Myanmar

9th PSC Meeting

18th June 2019 Sandaku Meeting Hall, DZGD Headquarter

Progress of Implementation in 2019 (Jan - Jun 2019)

Key Activities implemented in 2019

- Follow up of 8th PSC decisions
 - Monitoring of water infrastructure and rectification works
 - 1st round of Inspection Project Team/IPs/DRD Jan-Feb 2019
 - Rectification works by IPs Jan-Mar 2019
 - 2nd round of inspection Project Team/IPs/DRD Mar 2019
 - 3rd round of inspection Project Team Apr-May 2019
 - 4th round of Inspection Project Team 08 May 2019

Water infrastructure rectification works in Nyaung U township





Htee Pu village, Nyaung U





Water infrastructure Rectification works in Nyaung U township







Water infrastructure rectification in Chauk township



Twin Lat village, Chauk





Monitoring visits by Project Team





Key Activities implemented in 2019

- Follow up of 8th PSC decisions
 - Rehabilitation/Reforestation programme
 - Joint survival counting and patching activities (April 1-7, 2018) 86.79 %
 - Contract extension for Network Activities Group 3 months with additional budget for patching.
 - Establishment of nursery in Nyaung U and Chauk townships
 - Patching activities underway

Rehabilitation/reforestation activities (patching)

- Target Seedlings 50,000
- Actual Seedlings- 60,000
- Eucalyptus 10,000
- Shawphyu 50,000

- NYU 30,000
- Chauk -30,000





Rehabilitation/reforestation activities (patching)



Rehabilitation/reforestation activities (patching)









Key Activities implemented in 2019

- Impact Assessment Survey Nov-Dec 2018
- Township wise CF workshops Feb 2019
- UN Board of Auditors mission Mar 2019
- Terminal Evaluation Mar 2019
- 14th TAG meeting Mandalay, 21 Mar 2019
- Video documentary production May 2019
- Lessons learnt workshop 17 May 2019
- IP asset handover May 2019
- 15th TAG meeting 6 June 2019
- Magway Regional Government's visit to project villages in Chauk -11 June 219
 - U Win Maw Htay, Regional Minister for Agriculture, Livestock and Irrigation visited in Chauk Township on 11June 2019
 - Directors of Department of Agriculture, Livestock Breeding and Veterinary Department, and Department of Rural Development joined the mission
 - Heads of township departments also joined the event GAD, DZGD, FD, LBVD, DRD and DOA

Magway Regional Minister Visit in Chauk

Field visit to San Kan, Thit To Kan and Thalone Thway villages









Overall Project Results and Achievements

Salient Features of the Project

| Project Title | Addressing Climate Change Risks on Water Resources and Food Security in the Dry Zone of Myanmar | Kachin |
|----------------------|---|---------------------------------|
| Imp Entity | United Nations Development Programme | Sagaing |
| Exe Entity | United Nations Development Programme | Halfan Capacity Mandaday |
| Counterpart | Ministry of Natural Resources and Environmental Conservation | Chin Mandalay Magwer Magwe |
| Financing | US\$ 7,289,425 | Rakhaing Negating Kayah Bago |
| Co-financing | US\$ 624,998 (UNDP) US\$ 554,181 (Govt of Myanmar, in kind) | Ayeyanwady |
| Project duration | 4 years (Feb 2015 - Jun2019) | t- |
| Project location | 3 Regions, 5 Townships (Shwebo, Monywa, Myingyan, Nyaung U, Chauk) | 0 100 200 300 400 500 km |
| Target Population | 50,000 households - mainly landless and marginal/small holder farmers | 15 |

Project Overview (Objective/Outcomes/Outputs)

To reduce the vulnerability of farmers in Myanmar's Dry Zone to increasing drought and rainfall variability, and enhance the capacity of farmers to plan for and respond to future impacts of Climate Change on food security

Continuous freshwater availability is ensured during the dry seasons in 280 villages in the Dry Zone

Water capture and storage capacities in 280 villages enhanced to ensure sufficient irrigation and potable water supply during dry periods

6,141 hectares of micro-watersheds protected and rehabilitated through Farmer-Managed Natural Regeneration (FMNR) to increase natural water retention and reduce erosion

Community-based agro-forestry plots established on 3,983 hectares of lands to conserve soil and water

\$4,084,642

Climate-resilient agricultural and livestock practices enhanced in Myanmar's Dry Zone

Drought-resilient farming methods introduced to farmers to enhance the resilience of subsistent agriculture in the Dry Zone

Resilient post-harvest processing and storage systems introduced to reduce climate-induced postharvest losses (drought and floods)

Climate resilient livestock production systems introduced in 6,300 landless households to buffer the effects of flooding and drought on rural livelihoods

\$2,316,760

Timeliness and quality of climate risk information disseminated to Dry Zone farmers enhanced

Climate hazard maps and risk scenarios developed in each township to support community-based climate risk management and preparedness planning

Local level climate and disaster risk management framework strengthened for timely and effective communication of climate risk and early warning information

\$782,000

Output 1.1: Water capture and storage capacities in 280 villages enhanced to ensure sufficient irrigation and potable water supply during dry periods

| Activity | Prodoc Target | Revised Target | Achieved |
|-----------------------------|------------------|-------------------|----------|
| water diversion canals | 55 | 45 | 45 |
| water pumping systems | 70 | 70 | 70 |
| communal water tanks | 70 | 56 | 56 |
| communal water ponds | 150 | 150 | 136 |
| deept tube wells | 10 | 10 | 12 |
| soil and water conservation | 1,563 | 1,156 | 1,629 |
| shallow tube wells | 56 | 40 | 20 |

Water diversion canals





Communal water tanks







Deep tube wells







Shallow tube wells



Output 1.2: 6,141 ha of micro-watersheds protected and rehabilitated through Farmer-Managed Natural Regeneration (FMNR) to increase natural water retention and reduce erosion

| Activity | Prodoc Target | Revised Target | Achieved |
|-----------------------------|------------------|-------------------|----------|
| natural forest conservation | 2,160 | 3,913 | 3,050 |
| community-based forestry | 680 | 1458 | 1230 |
| Watershed planation | | 661 | 667 |
| plantation on public land | 1,360 | 770 | 1,189 |

| Activity | Prodoc Target | Revised Target | Achieved |
|--|------------------|-------------------|----------|
| homesteads and agroforestry plantation | 1,700 | 1,000 | 1,000 |
| Gap Planting | | 1458 | 667 |
| plantation on farm boundaries | 3,400 | 1,500 | 901 |
| Demonstration Plots | | 25 | 25 |

Rehabilitation/reforestation activities



| | Activity | Prodoc Target | Revised Target | Achieved |
|---|---|------------------|-------------------|----------|
| | nouseholds, extension workers and CSO/NGO members trained on climate- resilient farming methods | 12,600 | 11,550 | 17,680 |
| | Village-level research farm operational | 140 | 140 | 150 |
| ā | community participants in exchange visits and farmers field demonstrations are from non-project target villages | 20% | 20% | 98 HH |

Output 2.2: Resilient post-harvest processing and storage systems introduced to reduce climate-induced post-harvest losses (drought and floods)

| Activity | Prodoc Target | Revised Target | Achieved |
|--|------------------|-------------------|----------|
| locally produced threshing machines | 140 | 140 | 127 |
| establishment of thresher user groups | 140 | 140 | 127 |
| Crop storage facility | 36 | 36 | 36 |

Climate resilient agriculture practices



Climate resilient agriculture practices









Output 2.3: Climate resilient livestock production systems introduced in 6,300 landless households to buffer the effects of flooding and drought on rural livelihoods

| Activity | Prodoc Target | | Achieved |
|----------------------------------|------------------|-------|----------|
| No of households with | | | |
| increased diversity of livestock | | | |
| assets | 6,300 | 6,300 | 7,197 |

Climate resilient livestock practices



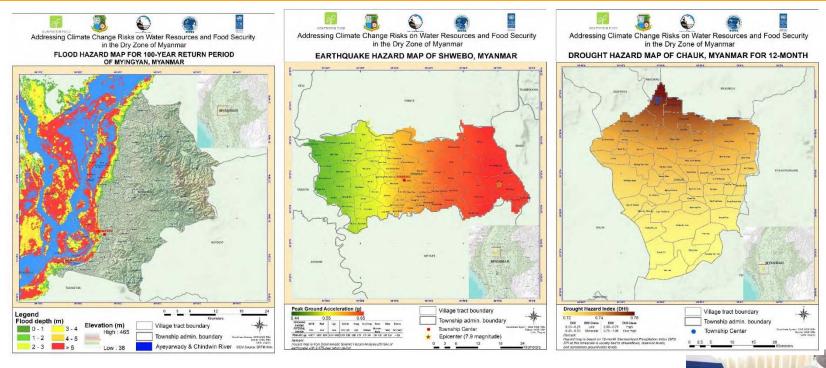
Output 3.1:Climate hazard maps & risk scenarios developed to support community-based climate risk mgt and preparedness planning

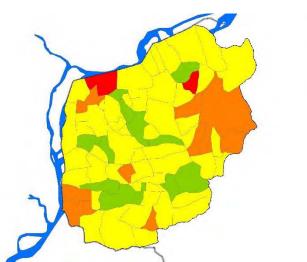


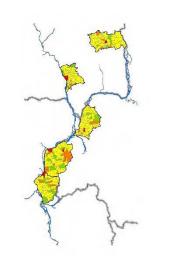
Output 3.2: Local level climate and disaster risk management framework strengthened for timely and effective communication of climate risk and early warning information

| Activity | Prodoc Target | Revised Target | Achieved |
|--|------------------|-------------------|----------|
| Community based disaster risk management committees | 70 | 70 | 75 |
| Climate Risk Information Subcommittes established | 5 | 5 | 5 |
| agro-meteorological bulletins/early warning and disaster response bulletins | 6 | 6 | 426 |

Hazard maps and risk scenarios









Climate risk information dissemination

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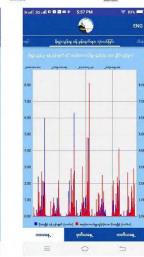




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Climate risk information dissemination

| Features | Detail |
|---------------------------|--|
| News Notification | News update Weather notifications Early warning notification |
| Disaster Information | Do's and Don'ts for 8 hazards Information on Disaster Management Law and Regulation |
| Emergency Contact List | List of emergency contacts |

Be Alert! Be Prepared!

သင့်မိုဘိုင်းဇုန်းထဲမှာ အမြန်ဆုံး ထည့်သွင်းထားလိုက်ပါ။



မန္တလေးတိုင်းဒေသကြီး၊ သဝိတ်ကျင်းမြို့နယ်အတွင်းရှိ လေဘေးသင့်ပြည်သူများအား ထောက်ပံ့မှုသတင်း မန္တလေးတိုင်းဒေသကြီး၊ သဝိတ်ကျင်းမြို့နယ်အတွင်း (၂၂ – ၄ – ၂၀၁၆) ရက်နေ့တွင်တိုက်စတ်ခဲ့ ဆက်ရန်...

ပဲခူးတိုင်းဒေသကြီး၊ သဲကုန်းမြို့နယ်၊ ပေါင်းတည်မြို့နယ်နှင့် ပြည်မြို့နယ်များအတွင်းရှိ ရပ်ကွက်ကျေးရွာများတွင် (၂၉ – ၄ – ၂၀၁၆ မှ ၃ – ၅ – ၂၀၁၆) ရက်နေ့အတွင်း စြစ်ပွားခဲ့သော လေဘေးအတွက် ကယ်ဆယ်ရေးပစ္စည်းနှင့် ထောက်ပံ့ငွေပေးအပ်မှုသတင်း ၁၊ ပဲရူးတိုင်းဒေသကြီး၊ သဲကုန်းမြို့နယ်၊ ပေါင်းတည်မြို့နယ်နှင့်ပြည်မြို့နယ်များ ဆက်ရန်...

လူမှုဝန်ထမ်းကယ်ဆယ်ရေးနှင့်

ပြန်လည်နေရာချထားရေးဝန်ကြီးဌာန ပြည်ထောင်စုဝန်ကြီး ဒေါက်တာဝင်းမြတ်အေးနှင့် ဌာနထိုင်ရာတာဝန်ရှိသူများသည် စစ်ဘေးရှောင်ကယ်ဆယ်ရေးစခန်းနှင့်



Google Play Store

မှာ DAN Myanmar ကိုရှာမြီး Download ရယူနိုင်ပါမြီ။

In partnership with:



Developed by:







Community based disaster risk management



| Thematic Area | Households |
|---|------------|
| Training on watershed management and enhanced techniques of soil & water conservation | 11,489 |
| Training on climate-resilient agriculture and livestock practices. | 39,875 |
| Training on disaster and climate risk management | 11,500 |
| TOTAL | 62,864 |
| | |

Project Infographics





WATER ACCESS

Enhancing water access and availability through small-scale water infrastructure.

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LAND REHABILITATED/ REFORESTED

- 70 WATER PUMPING SYSTEMS
- 12 DEEP TUBE WELLS
- 20 SHALLOW TUBE WELLS
- 56 COMMUNAL WATER TANKS FOR COLLECTING RAINWATER
- 136 COMMUNAL WATER PONDS REHABILITATED

1600ha

IMPROVED LAND MANAGEMENT TO CONSERVE WATER

280

VILLAGES WITH ENHANCED FRESHWATER AVAILABILITY DURING DRY SEASON

CLIMATE-RESILIENT FARMING

Promoting climate-resilient agriculture and livestock practices.

1244 DEMONSTRATION PLOTS

Using enhanced climate-resilient agriculture practices.

CROP THRESHERS

With operation and maintenance training.

36 ELEVATED SEED STORAGE FACILITIES

With quality seeds of key crops.

7,197 HOUSEHOLDS

provided with diversified livestock species (chickens, goats, pigs).

ALERTING & PROTECTING

Improving timeliness and quality of climate risk information sharing short-term, medium-term, and longer-term climate data with farmers.

5 TOWNSHIPS

Risk and vulnerability assessments conducted and hazard maps created. (flood, earthquake, drought)

75 COMMUNITY BASED DISASTER RISK MANAGEMENT COMMITTEES

established and trained on disaster risk reduction and management at village level.

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1 COMPREHENSIVE MOBILE PHONE APPLICATION

For disaster alerts.

1 COMPREHENSIVE MOBILE PHONE APPLICATION For weather forecasts.



TRAINING

Building capacity & enhancing techniques.

9,377

HOUSEHOLDS

Received training on watershed management and enhanced techniques of soil & water conservation.

40,722 HOUSEHOLDS

Received training on climate-resilient agriculture and livestock practices.

11,500 PEOPLE

Received training on disaster and climate risk management.

Financial Achievement

| Project Budget | 2014/2015 | 2016 | 2017 | 2018 | 2019 |
|----------------|------------|--------------|--------------|--------------|------------|
| 7,945,855.00 | 497,015.57 | 1,854,653.43 | 2,540,409.50 | 2,636,966.86 | 420,967.44 |

Expected financial delivery for 2019 = 94.67 %

Overall Project Delivery (2014-2019) = 98.83%

Way forward/next steps

- Transfer/disposal of project asset
- Preparation of donor report (Project Performance Report
- Preparation of Project Completion Report
- Project Closure as per UNDP/AF requirements



"Once you carry your own water you will learn the value of every drop"

For more information:

Visit: <u>http://www.mm.undp.org</u>; Like us: <u>www.facebook.com/UndpMyanmar</u> Follow us: <u>https://twitter.com/UNDP_Myanmar</u> <u>Contact: Tel: (95-1) 542910-19, fax: (95-1) 544531, 5456</u>