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ABOUT THE GHANA DGM PROJECT

Created as a special window under the Forest Investment Programme (FIP), the G-DGM is designed to promote the inclusion of forest-dependent communities in policy formulation and initiatives that seek to reduce deforestation and degradation. The G-DGM seeks to strengthen the capacity of local communities to participate effectively in FIP and REDD+ processes and create livelihood opportunities that can also generate benefits of mitigation and adaptation, while respecting culture, traditional knowledge and indigenous forest management systems.

The key thrust of the G-DGM is the dissemination of knowledge to increase communities' understanding of how unsustainable practices heighten their vulnerabilities by contributing to climate change, which adversely affect their livelihoods, and ways to reduce deforestation and climate change and its impacts on livelihoods and well-being – component 1. The principal means of meeting this need is training.

This is followed by the demand-driven provision of grants to local communities, and community-based organizations – component 2. The grants initiative is to further engage communities to put into practice what they have learned and to better understand the linkages between the knowledge they have acquired and the investments and practices they engage in on the ground. The third project component relates to support for its effective governance, monitoring and evaluation.

The G-DGM project acts in synergy with other projects under the Ghana FIP. To promote these synergies the G-DGM is being implemented in 53 communities in the Western North, Bono and Bono East Regions where FIP is largely operational.

A photograph of a young tree sapling in a field. The sapling is in the foreground, slightly to the right. The ground is covered with a layer of straw mulch. In the background, there are other plants, including some taller green stalks and a dense area of green foliage. The lighting is bright, suggesting a sunny day.

**SUPPORTING
SUSTAINABLE &
CLIMATE-SMART
INITIATIVES**

PROTECTING COMMUNITY PLANTATIONS FROM DRY WEATHER CONDITIONS



Tree sapling on community plantation receive water through bottle drip irrigation technique

Over 190 hectares of tree and cashew plantations established in 15 local communities under the Ghana Dedicated Grant Mechanism project have survived their first dry season. Solidaridad, during the dry periods in January and February, supported members of local communities and community-based organizations to undertake robust measures to safeguard the plantations from moisture stress and bushfires.

The measures adopted include:

- reuse of plastic bottles for drip irrigation,
- localised mulching to conserve water around tree seedlings,
- creation of green fire belts,
- creation of bare ground fire belts,
- regular weeding and
- using community fire patrols to look out for potential fire hazards.

In Nante, in the Bono East region, the community has established a 20-acre tree plantation of cashew, frake and mahogany trees. Mr Kwabena Agyare, chairman of the community project committee, lauded the dedication of the project in ensuring the survival of the trees during the harmattan season.

“The drip irrigation method has been very effective. After just a week of regularly applying water to the trees, it has revived a lot of them that appeared dead. We are happy that the project is dedicated to ensuring that we benefit fully from the trees we have planted,” says Kwabena Agyare.

Similarly, in Sefwi Asafo, a project community in the Western North region — where local authorities have dedicated 66 acres of degraded land for replanting activities — over 6,000 frake, acacia, mahogany and tiama trees have been protected from wilt and fire through the deliberate application of water and the creation of fire belts.

Mr Gilbert Owusu Sanchez, secretary of the community project committee in Asafo commended the project team for the support. He indicated that the use of plastic bottles to steadily provide water to the trees has increasingly improved their survival rates in the dry season. According to him, a lot of farmers who suffered from drought stress have transferred the knowledge on the drip irrigation method to their farms to improve the moisture content of the soil.



DGM field officer assists a community member to adjust the water flow from a bottle

Since 2019, the project has supplied 90,000 acacia seedlings, 162,482 cashew seedlings and 100,000 economic trees to 53 communities and nine community-based organizations to establish plantations and woodlots, restore trees around water bodies and for agroforestry purposes.

The implementation of the dry season strategies forms part of Solidaridad’s effort to build the resilience of farmers and their communities to climate change under the World bank-funded project.



DGM field officer and community members work together to collect water for drip irrigation



A revived tree sapling after a steady supply of water



A beneficiary from the Asafo community adjusts water flow from a bottle



Community members collect water for drip irrigation

BEEKEEPING: IMPROVING LOCAL COMMUNITIES' LIVELIHOODS AND CLIMATE RESILIENCE



Members of the Peaceful Tree Growers' Association harvest honeycomb from beehives set up in the forest

The Peaceful Tree Growers' Association, a community-based organization in Koradaso, a beneficiary community in the Bono East region, is now producing honey under sustainable and environmentally sound conditions after receiving training and equipment on beekeeping from Solidaridad.

This climate-smart beekeeping initiative is enabling the group to contribute to efforts towards sustainable forest management in their community while serving as a means to diversify their sources of livelihood.

The group is one of four community-based organizations who have received grants from the Ghana Dedicated Grant Mechanism for Local Communities to engage in climate-smart beekeeping, in addition to tree planting initiatives as adaptive responses to climate change.

Solidaridad provided all four with practical training on improved beekeeping techniques and equipment, such as honey extraction machines, smokers, beekeeping suits, wax, Langstroth beehives, and other tools to facilitate sustainable honey production.

Touching on how the beekeeping project has financially empowered the association, Georgina Kuubenyere, treasurer of the association, says the group harvests honey multiple times a year which is providing them with an all-year-round income.

"We are using the money to raise more seedlings for our members and other individuals who are interested in planting trees on their farms. The training has enabled us to undertake climate-related activities which will benefit the Koradaso community," says Georgina.

The Chairman of the association, Ophelius Siebekpiir, says Solidaridad has provided them with poly pots and other nursery materials to establish a tree nursery site with reliable water supply where indigenous and endangered tree

species can be raised to enrich degraded forests. He adds that the Peaceful Tree Growers' Association is confident of sustaining the beekeeping and tree nursery initiatives, thanks to the extensive training Solidaridad has provided on organizational development, group dynamics, climate response and REDD+ processes under the project.



The community group attends to tree seedlings

Beekeeping is an important, sustainable and alternative source of income in rural areas. Most importantly, climate-smart beekeeping is considered as a practical tool for stimulating action from forest communities towards sustainable forest management, which ultimately triggers community efforts in mitigating climate change. This has been evident in communities where community-based organizations are implementing beekeeping as a climate-response intervention.

"Now, a lot of farmers do not set fire to their farms because of the fear that it might spread to the forest and destroy the beehives. We are now aware of the benefits we can derive from the forests and its importance to reducing the impact of climate change," says Odilous Taasagr, a member of the Koradaso Peaceful Tree Growers' Association.



Members of the Peaceful Tree Growers' Association exhibit their first honey



The chief of Koradaso with some of the extracted honey



The community group receives beekeeping equipment



DGM field officers assess the beehives



Women are actively involved in constructing hives

RESTORING FOREST LANDSCAPES THROUGH ECOTOURISM DEVELOPMENT



Chief of Duasidan with one of the monkeys at the sanctuary

Local authorities in Duasidan, a forest-fringe farming community in the Bono East region of Ghana, have enhanced the protection of over 60 acres of forest lands by strictly prohibiting farming, hunting and timber logging to develop its monkey sanctuary into a booming ecotourism site.

Home to hundreds of Campell's mona, spot-nosed and Olive Colobus monkeys, Solidaridad through the Ghana Dedicated Grant Mechanism for Local Communities is supporting the Ecotourism and Development Committee — a community-based organization in Duasidan — with grants to enhance the ecological function of the forest.

The Committee is one of nine community-based organizations that have received grants to undertake sustainable small-scale initiatives that contribute to landscape restoration, sustainable forest management, and to help them adapt to the impacts of climate change.



Members of the Ecotourism Committee at the monkey sanctuary

The Ecotourism and Development Committee is utilising the grant for the revamp of the Duasidan monkey sanctuary. So far members of the Committee have planted over a thousand ceiba, mansonina, mahogany and frake trees to restore lost vegetative cover in the sanctuary. The project is also facilitating the committee's access to fruit trees, which will serve as food for the monkeys.

“We are very happy that the project has provided us with different tree species to plant in our sacred sanctuary. Most of the communities around us have lost valuable forests through bush burning and illegal logging. Protecting the forests in Duasidan means safeguarding the monkey sanctuary, from which we can derive long-term economic benefits. And that is why I have dedicated more forest land for this purpose,” says Nana Oppong Kyekyeku Ababio, chief of Duasidan.



The community group plants trees to enrich the sanctuary

Commending Solidaridad for the training on climate change, the chief said every community member is now aware that when they plant more trees in the forest and on their farms, they can ultimately improve the harsh weather conditions affecting their crops.

Solidaridad is working closely with the local authorities, traditional rulers and management of the monkey sanctuary to implement an action plan that seeks to enhance the outlook of the site and formalise its operations to increase patronage. Plans have also been outlined to create hiking trails and walkways, label tree species of economic and socio-cultural values, set up office and reception areas and increase publicity with promotional materials. The project is facilitating strategic collaborations with the Ghana Tourism Authority, the Game and Wildlife Authority, and other relevant stakeholders.



The monkeys get an afternoon snack

Highlighting the socio-economic benefits the community stands to gain from a revamped monkey sanctuary, the Chairman of the Ecotourism and Development Committee, Mr Joseph Peprah Marfo indicates that a functional tourist site will provide multiple income-generating activities for the women and youth in the community. He notes that the support from the project aligns with the community's age-long dream to become one of the best ecotourism sites within the Bono landscape.

The project has also provided training in group development and cohesion, financial literacy, records keeping, advocacy and lobbying, leadership and alternative livelihoods for members of the committee to enable them to manage the facility and sustain the support received from the project.



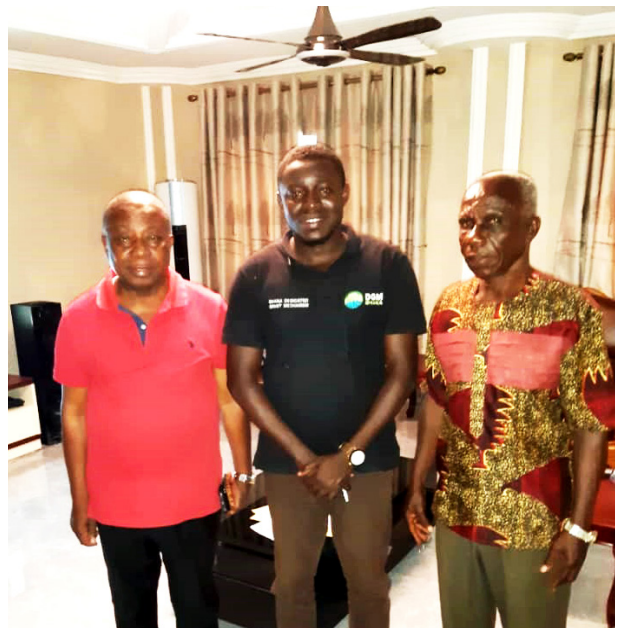
Members of the Ecotourism Committee at the sanctuary

Member of Parliament for Dormaa Central Commends DGM

Mr Kwaku Agyemang-Manu, the Member of Parliament for the area, who is also Ghana's Minister of Health, has lauded the efforts of the DGM project towards revamping the Duasidan Monkey Sanctuary.

"The revamp will not only unleash the sanctuary's enormous tourism potential but will help preserve the natural habitat of the monkeys, which is sacred to the people," he says.

Mr Agyemang-Manu made this known when the project team paid him a working visit at his residence in Dormaa Ahenkro. He indicated that the development of the sanctuary into an ecotourism site had been on his agenda and that of the Municipal Assembly. The Member of Parliament touted the ongoing initiative to enrich the Duasidan forest and provide a facelift to the sanctuary as highly commendable.



The Member of Parliament (left), DGM field officer (middle) and Chairman of the Ecotourism Committee during the visit

He assured the team of his preparedness to provide the needed support to complement the work of Solidaridad in his constituency.



**PROVIDING
RENEWABLE
ENERGY
SOLUTIONS**

THIRTY-SEVEN COMMUNITIES BENEFIT FROM SOLAR-POWERED BOREHOLES



Solar panel and pump installations complete at Asunso No. 1

As part of efforts to help local communities adapt to climate change, the Ghana Dedicated Grant Mechanism for Local Communities project is providing solar-powered mechanized boreholes to 37 local communities. The boreholes will enable the communities to have access to water for household and irrigation purposes.

The solar-powered water supply system offers climate-smart and practical solutions to address water scarcity in rural communities. The system generates zero emissions and provides a faster and more efficient supply of water with minimal day-to-day running costs as compared to motorized, hand-pumps and electric systems, respectively. When combined with sufficient storage tanks, they provide a critical water reserve for communities that are adversely impacted by irregular rainfall patterns.

Solidaridad is facilitating the construction of the solar-powered boreholes with DGM project grants dedicated to community-led initiatives. The project supports local communities to implement initiatives they consider as critical climate-response interventions.

Out of the 37 earmarked boreholes, 36 have been successfully drilled across the Western North, Bono and Bono East regions, with work on the remaining one in progress.

The construction of the water facility, installation of solar panels and water pumps are also progressing steadily. In the Bono and Bono East regions, work on distribution pipelines, storage tanks and standpipes are far advanced, with fifteen communities having their solar-powered boreholes completed.

“This borehole is a game-changer for us. We used to travel about five miles to collect water from a stream. Our predicament worsened during the dry season. But today, we have access to potable water right here in the community. We are very grateful to the DGM project for delivering on its promise to provide us with a reliable water supply system,” says Emmanuel Addai, a resident of Abease.



Storage tanks are provided to ensure access to water during dry periods

For Opong Dartey in the Namasua community, the solar-powered borehole is a sustainable intervention that is providing long-term solutions to water challenges in vulnerable communities.

“The borehole will serve the water needs of this community for a long time because it is solar-powered. Since its operation is not dependent on the national grid, we will have access to water at all times. The DGM project has demonstrated that it has the wellbeing of this community at heart and we promise to take good care of the borehole,” says Opong.

To enhance the sustainability of the boreholes and promote a sense of ownership toward their management, Solidaridad has instituted a community-based project committee to have oversight responsibility. The project has also outlined plans to build the technical capacity of the local people in operational and maintenance procedures to ensure the durability of the boreholes.



FROM OUR BENEFICIARIES

BENEFICIARIES SHARE THEIR STORIES

Three years into project implementation, DGM project beneficiaries share stories of how the adoption of sustainable land-use practices is helping them to cope with the adverse impact of climate change in their communities. The stories also demonstrate how individuals from local communities are contributing to efforts toward reducing forest degradation, deforestation and climate change.

1. NAME: PATRICIA TANDOH



Community: Bodi, Western North region

When Patricia Tandoh joined her husband in Bodi 25 years ago, she cultivated a backyard vegetable farm until she could afford to start a cocoa farm. She recounts how predictable rainfall was during that period. This contributed to bountiful yield. However, erratic rainfall and lengthy periods of dry spells in recent times have taken a toll on the productivity of her cocoa farm and her income.

When she heard about climate change and ways to reduce its impacts from her community Information Centre, the messages resonated well with her.

With an increased appetite for more, she decided to make herself available for additional training that Solidaridad offered to her local community through the DGM project.

“Through the training, I understood that slash-and-burn, a popular land preparation method, reduces soil fertility and contributes to climate change. Therefore, I changed to a more sustainable practice, slash-and-mulch. Since then, I have noticed that the land is no longer dry and hard. Leaving the slashed vegetation as a cover has also helped control erosion on my farm”, she says.

In Bodi, Solidaridad, through the Ghana DGM project, has sensitized hundreds of people on climate change and REDD+ practices and supplied to farmers thousands of trees with shade and economic value.

After voluntarily planting 50 mahogany and frake trees on her young cocoa farm, Patricia is receiving additional support from the project to plant more trees on her farm.

2. NAME: JOSEPH TAMANGYA



Community: Adjalaja-Beposo, Bono East region

“I miss the DGM Radio Broadcast because it was very educative. My family and I used to gather around our radio set to listen to it. My children who were too young to join the training are now aware of the need to plant more trees to address climate change,” says Joseph Tamangya, a DGM project beneficiary who lives in the Beposo community.

Solidaridad has leveraged the power of radio as an effective means of disseminating messages to sensitize local communities on climate change and REDD+ practices.

After joining the training in his community, 39-year-old Joseph has gained a better insight into climate change and the role trees play in slowing it down.

“The heat is unbearable these days — our crops are dying. After learning from the training that planting trees will improve the harsh weather conditions, I have planted 100 trees at the community’s clinic,” says Joseph.

Joseph has also planted two acres of cashew trees and 50 mahogany trees on his farm. Today, he is restoring the lost vegetation along the Pru river in his community with grants from the Ghana Dedicated Grant Mechanism for Local Communities project.



3. NAMES: ATTA KWADWO JNR. AND SNR.

Community: Dawadawa No. 2, Bono East region

From birth, the twins have shared almost everything from food to clothing to places of residence. At 43 years, they still share a special bond in their work as farmers and chief linguists in their community. Joined to the same placenta as fetuses, the twins who live in the Dawadawa No. 2 community are also united in their passion to tackle climate change after receiving an in-depth understanding of the phenomenon through the DGM project.

“Together, we have planted five acres of frake trees, three acres of mahogany trees, and three acres of

cashew trees with support from the project. Before the intervention, we did not keep any trees on our yam field because we did not understand their value. But after the training, our mindset and that of the community changed. We now understand that if we do not replace the trees we have destroyed, our existence will be threatened,” says Atta Kwadwo Senior.

In the Dawadawa No. 2 community, the project has supported the establishment of a 30-acre cashew plantation and protected them with drought-resistant acacia trees as fire belts. As part of the community leaders who offered the land for the plantation, the twins expect the cashew to provide economic returns and also restore the lost vegetative cover in the area.

To enable the community people to further their learning and share experiences on sustainable land-use practices, Solidaridad facilitated the participation of 16 farmers in the Global Landscape Forum held in Accra in 2019. Atta Kwadwo Junior was part of the hundreds of stakeholders that discussed solutions and the need to restore Africa’s degraded landscapes at the forum.

“The irregular rainfall and strong heat from the sun are destroying our crops. We were happy to share our plight as farmers and how the project is supporting us to protect our livelihoods. We are hopeful that the weather conditions will get better since we now act responsibly toward the environment,” says Atta Kwadwo Junior.



4. NAME: SUSSANA ADJO

Community: Bechima, Western North region

Before the training on climate change and sustainable land-use practices, cocoa farmers in DGM project communities destroyed trees on their farms and engaged in slash-and-burn agriculture, which exposed their crops to devastating climatic conditions. The practices compromised the function of the landscape and affected the productive capacity of their lands.

“Ten years ago, I could harvest 30 bags from my cocoa farm but now I cannot produce half of that quantity. The cocoa I established five years ago have also started dying; the leaves have dried out,” says Sussana Adjo.

“I now know that it is human activities such as burning and wanton tree cutting that have brought about the weather changes. I have also learned that planting trees can reduce the excessive heat we currently experience. As a result, I have planted 30 frake trees on my new cocoa farm with seedlings I got from the project,” she says.

The interventions Solidaridad provide through the DGM project are not only reforming unsustainable land-use practices, but are producing additional livelihood benefits.

“I have not used weedicides after practising ‘proka’ (slash-and-mulch) this season, because the practice helps to control weeds. Also, after following the recommended spacing to grow plantain this season, I have harvested bigger bunches,” says Sussana.



5. NAME: PHILOMENA AMPOMA

Community: Abease, Bono East region

Women tend to bear the brunt of climate-induced stressors such as diseases, water scarcity and food shortages. They are usually at the forefront of seeking relief for their children and the entire household.

By design, the Ghana DGM project integrates gender considerations, including perceptions and actions into the preparation, design, implementation, as well as monitoring and evaluation of activities.

Throughout the project implementation, Solidaridad has been creating unique spaces for both women and

men, including the marginalized, to share their views, either separately or jointly, whichever yields the best dialogue outcomes. The outcome has been the active involvement of women in climate-resilient initiatives that reduce their vulnerabilities.

Philomena Ampoma, a 45-year-old single mother of six, is one of 9,000 women whom Solidaridad has supported to undertake sustainable practices that protect the environment and improve yields under the DGM project.

“During DGM training sessions, we [women] were separated from the men. This allowed us to freely express our concerns and ideas. Because of this, I did not want to miss any of the training sessions.” says Philomena.

Having farmed for almost half of her lifetime, she experienced low productivity in her yam and maize farm in the past decade due to prolonged dry periods.

“I used to think we were experiencing unfavourable weather conditions because of an ancestral curse. But through the project, I have learned that the low rainfall we have been experiencing is as a result of climate change, partly caused by our unsustainable practices. I had been cutting down trees and burning my farm. This left my land bare and parched,” she says.

Following Solidaridad’s training, Philomena is now practicing climate-smart agriculture.

“Today, I do not burn the weeds on my farm during land preparation for planting. I practice mulching by simply leaving the weeds to rot after weeding. This improves soil fertility. My foliage of maize I plant look very green and healthy and the land feels cool all the time even when the weather is hot. I am already seeing signs of a bumper harvest that I have not experienced for years,” she says.

Philomena has also planted 50 cashew trees on her farm with seedlings from the project. She hopes to generate more income from her farm during the next harvesting season.

“As a single mother, it is very tough fending for six children on my own. The cashew will provide me and my children the extra income I badly need,” she says.

GHANA DEDICATED GRANT MECHANISM FOR LOCAL COMMUNITIES



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