

Solidaridad



CYCLONE IDAI REPORT

MOZAMBIQUE ASSESSMENT



1. PURPOSE OF THE REPORT

This report was compiled for purposes of providing information on the effect of Cyclone Idai on Beekeeping Initiatives in Mozambique after the Apimondia Regional Commission for Africa President formally communicated with Apimondia on the natural disaster that occurred in the African Region in accordance with the Regional Commission Mandate / responsibilities – “Analyzing the needs of the local beekeeping communities and coordinating the relief actions in case of natural or human disasters”.

This report is intended to be circulated to:

- Apimondia
- Solidaridad
- Mozambican Government

2. INTRODUCTION

Apimondia, the International Federation of Beekeepers’ Associations, is the world organisation representing the interests of apiculture. It facilitates links between beekeepers, scientists and all those involved in beekeeping and represents apiculture at international level to many bodies, for example General Agreement on Trade and Tariff (GATT), the Food and Agriculture Organisation of the UN (FAO), consumer and agricultural interests.

Apimondia stems from the Standing Committee of the International Apicultural Congresses created in 1893 holding the first congress in 1897 in Belgium. Apimondia in its current status as a federation was founded in the Netherlands in 1949.

Apimondia consists of the General Assembly, represented by its members (currently more than 110 beekeepers’ associations and apicultural institutions from more than 80 countries), the Management Board, seven Scientific Commissions (Apitherapy, Beekeeping Economy, Beekeeping for Rural Development, Beekeeping Technology and Quality, Pollination and Bee Flora, Bee Health and Bee Biology) and five Regional Commissions (Africa, Americas, Asia, Europe and Oceania).

Apimondia General Secretariat in Rome, Italy, provides a focal point for locating information on bees and beekeeping and co-ordinates the organisation of Apimondia international congresses and symposia.

The activities of Apimondia are coordinated at regional level (Continent) by the Regional Commissions. One of the major activities of the Regional Commission is analyzing the needs of local beekeeping communities and coordinating the relief actions in case of natural disasters in their respective Regions. In the case of the African Region, Cyclone Idai is one such case where the Regional Commission President, Mr. David Mukomana, formally raised the need for relief for communities in Mozambique, Malawi and Zimbabwe as part of these communities affected are engaged in beekeeping activities as their sources of livelihoods. Apimondia gave the greenlight for the assessment to be done and a report provided that will detail the nature of intervention required with the hope of engaging partners to assist in the rebuilding of the beekeeping initiatives in the affected areas.

3. ASSESSMENT VISIT

Based on the Regional Commission Mandate, a formal communication on behalf of Apimondia was sent to the Mozambican government by the Regional Commission President through the Embassy in Harare, expressing solidarity with the people of Mozambique about the disaster visited on many communities especially in the Manica Province as well as the intention to visit these affected areas to carry out an assessment of the effect of the cyclone on beekeeping initiatives with the intention of raising assistance.

The Regional Commission managed to get support from Solidaridad in order for the assessment visit to be undertaken in Mozambique. The following visits were undertaken in the Manica Province of Mozambique:

Date	Area	Purpose
25 July 2019	National Institute of Disaster Management - Chimoio	To meet the Government officials responsible for disaster management for a courtesy visit and discuss about the assessment; and

		<p>To also seek guidance on the areas to visit and make the assessment.</p> <p>A meeting was held 2019 between the Regional Commission President, the Office Responsible for Disaster Response in Chimoio, represented by Mr. Borges Viagem – Chief of Technical Department – National Institute of Disaster Management (INGC) and Solidaridad representatives in Manica to advise of the visit and seek guidance on how the areas to be assessed can be reached. The President provided an overview of Apimondia, the role of the Regional Commission and the purpose of the visit.</p> <p>Mr. Viagem appreciated the efforts by Apimondia to identify, visit and provide possible assistance to the Mozambican communities that desperately need such assistance as the government has been overwhelmed by the disaster and the extent of the devastation which they cannot address without external intervention. He advised that it will be important to go the District Offices and get assistance from the Agriculture Division responsible for Apiculture.</p>
26 July 2019	Sussundenga District Offices	<p>To discuss the assessment in the cyclone-hit areas of the district; and</p> <p>To facilitate / coordinate the community visits and get officials to visit the communities with.</p> <p>The team proceeded to Sussundenga District Offices where they were assigned the Technical</p>

		Apiculture Officer, Mr. Judah Alberto who is responsible for Apiculture in the district to coordinate and visit the affected areas. He suggested that the team visits two villages where beekeeping activities are very prominent and most affected by the cyclone. Mr. Alberto managed to coordinate the communities of Nyanguzwe village and Zombe area which were then visited with his guidance. He indicated that many villages also doing beekeeping were affected but not easily accessible due to the road infrastructure damage and the limited time for the visit.
26 July 2019	Nyanguzwe Village	To meet the community affected by Cyclone and hear their views; and To physically assess the damage on beekeeping activities and potential to restart
26 July 2019	Muwawa – Darwe Local Area	To meet the community affected by Cyclone and hear their views; and To physically assess the damage on beekeeping activities and potential to restart

4. Areas Visited

The two villages indeed confirmed that there have been and are beekeeping activities based on the apiary sites visited where a number of hives were identified including wild nests. The beekeepers are using traditional hives as well as the Kenya Top Bar hives including provision of stands on which the hives were mounted. The other apiary sites in the Chimanimani area could not be visited as they are inaccessible due to the damages on the road infrastructure.

The detailed information obtained during the respective visits are captured in the table below:

Village	Information gathered	Issues
<p>Nyanguzwe Village</p>	<p>There are two associations existing called – Mutiipfuma Nhaka Yedu and Chasimba Fruit Multiplication.</p> <p>Mutiipfuma has 60 members, 50 women and 10 men as the association was formed to empower women who have been marginalized for a while.</p> <p>The members have not received any formal training and have been struggling with their beekeeping activities due to lack of training and skills.</p> <p>The group was once assisted by Michael Foundation with hives where each member was given on average 3 hives.</p> <p>The hives being used are mostly traditional and Top Bar hives.</p> <p>The members interviewed had 120 hives before the cyclone but at least 80 hives were destroyed by the cyclone. This number only relates to the members who attended the meeting and families who knew the numbers for their neighbors.</p>	<p>The members raised a number of issues which they feel if attended to, they can rebuild their livelihoods again and recover from the effects of the cyclone.</p> <p>The following are the main issues the Nyanguzwe Association raised:</p> <ul style="list-style-type: none"> • They are not able to replace the hives destroyed by the cyclone. The number of hives they have are few to make any meaningful harvest that can sustain their families. • The hives they had were donated and were not good quality. They wish to be capacitated in hive production so they are able to make their hives using the timber locally available. • The communities raised the issue of a processing Centre so they are able

	<p>The number of members for the Masimba Fruit Multiplication were not available as the association was not represented and records could not be accessed. Similarly, the number of hives or effects of the cyclone could not be quantified.</p>	<p>to sell their honey which will be processed and packaged in the district, thus creating jobs and value addition to their honey. Currently, their honey is being bought raw, processed and packaged outside the district.</p> <ul style="list-style-type: none"> • Training in beekeeping, record keeping and general apiary management is an issue they feel need attention. • The issue of market was also raised as they feel the price being offered is low and often honey is not collected leaving them stranded. •
<p>Muwawa – Darwe Local Area (Chimanimani)</p>	<p>There are 5 beekeeping clubs / groups in the Chimanimani – Zombe area. These are Zombe Central; Zombe Muranga; Zombe Muriro; Mapira and Chishawo.</p> <p>The beekeepers met were from the Zombe Central who have been doing traditional beekeeping for a number of years. They received some donations of top bar hives from Michael</p>	<p>The following issues were raised by the Zombe Central Group members:</p> <ul style="list-style-type: none"> • The need for hives to be replaced as they are not in a position to buy new hives. • The group also raised the issue of protective equipment. This has

	<p>Foundation and were now using modern hives as well.</p> <p>The Zombe Central has 45 members, 15 women and 30 men.</p> <p>The actual apiary sites could not be accessed due to damaged infrastructure and the meeting was held at the township.</p> <p>The group had 259 hives that were all colonized. Some new hives were donated by Michael Foundation with an average of each member receiving 5 hives though not all members received the hives.</p> <p>Of the hives owned by the members present at the meeting, at least 100 of them were destroyed by the high winds. None of their hives were swept away as they had mounted them on high ground which were not flooded. However, the 50 hives were damaged by the falling trees and braches beyond repair and are no-longer usable.</p> <p>Besides the hives damaged, there are 52 families whose homes were swept away with their sources of livelihoods destroyed and looking at joining beekeeping to at least rebuild their shattered lives. These families are part of those now sheltered at</p>	<p>seen them not able to repair some of their hives with colonies due to lack of equipment.</p> <ul style="list-style-type: none"> • Some of the group members need training as part of them were offered training by a beekeeper who came from Zimbabwe after the cyclone as a way of helping.
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	<p>townships in tents and depending on handouts.</p> <p>The community also indicated that they have many places they were earmarking to do beekeeping for conservation though the hives were not enough to make a difference.</p>	
<p>Zombe Muranga; Zombe Muriro; Mapira and Chiswawo</p>	<p>These groups could not be visited nor information gathered due to lack of accessibility and communication challenges.</p> <p>However, the Technical Field Officer confirmed that there are significant beekeeping activities in these areas and were equally affected by the cyclone. These are part of the areas that are not easily accessible and require extensive walking to access.</p> <p>These groups have their honey collected by the same buyer from Michael Foundation who collects from Zombe Central.</p>	<p>The Zombe Central members interviewed indicated that these groups had similar challenges as theirs. These groups did not receive any training they received and would need formal training.</p>

5. Cyclone effect in Summary

The damage caused by the cyclone were in three parts. In order to capture the actual effect, the team sought to record the damages on apiaries of the members that were at the respective meetings.

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- i. Hives were destroyed by the massive winds that caused trees to fall and completely destroy many hives that were within their proximity. There is no record of hives washed away as they were mounted in apiaries generally on higher grounds such as by the hill sides. The hives are no-longer usable and some colonies were lost due to inhabitable hives. From the members that attended the meetings, the number of hives that were destroyed are in excess of 180. The number of hives lost from the other 5 groups could not be quantified as the members could not attend the meeting due to accessibility and failure to contact them in good time by the Technical Officer.
 - ii. The cyclone destroyed homes and washed away belongings of a number of households. Included were food stores and beekeeping equipment especially in the Chimanimani area where a number of households are now sheltered at the Muwawa – Darwe township and schools as they no-longer have homes. Development partners are helping with all the necessities for these families to eat, cloth and be sheltered until they are able to rebuild their homes, a process that will take time and resources.
 - iii. Part of the destruction was on the various forms and means of survival of the communities leaving them with virtually no form of livelihoods to feed their families and send their kids to school.

Based on the interviews, the extent of the damage on beekeepers especially the hives in the Sussundenga District can be estimated to be in excess of 800 hives in the Chimanimani area alone, covering all the 7 groups / associations. This number could be more if all the villages of Sussundenga engaging in beekeeping were visited and information collected.

6. Beekeeping potential

The province of Manica and the Sussundenga District is unbelievably rich with flora and flowering plants / trees that can support beekeeping to commercial levels that will not only see the communities supplying the local market but massive volumes of export.

The first meeting in Nyanguzwe was held by the edge of thick bushveld where we were greeted by the buzzing of bees in almost every plant that we could see. The bee population is incredible. The visit to some of the hives belonging to the family provided enough proof of the abundance

of bees in the area. Even some colonies are in wild nests and it is all the sound of bees in the bush.

Such is the potential that before the cyclone, the Michael Foundation made efforts donating hives to a number of beekeepers as well as providing basic training on honey handling so they can collect the honey for packaging in Chimoio and Beira. However, the hives were not adequate as individuals got on average 5 hives, which did not make much difference given the massive potential in the area based on the bee colony population and forage throughout the year.

Realizing the potential, many groups were formed and a number of them have been waiting for assistance with hives so they can start beekeeping in order to earn a living without having to resort to cutting trees for sale as firewood or charcoal.



Picture above: Bee Forage very popular with bees that is in abundance in Sussundenga

7. Recommendations

The extent of damage in the Mozambican Province of Manica and especially in the Chimanimani area is beyond the physical damage that has been reported and seen by the eyes. The situation in the area requires urgent intervention to quickly restore the livelihoods of the people in the affected areas and equally to fully restore their dignity as human beings who have the right to live a normal life.

The immediate intervention required is the assurance to the communities affected that the rest of the world identifies with them and they are making effort to make their lives better. Thus the visit by the Regional Commission brought hope to the beekeepers and equally those that are looking at any alternative project they can quickly do in order for them to be back on their feet. And beekeeping is such a realistic option, hence the need to urgently seek help to mobilize resources to engage the communities to do beekeeping as a source of livelihood for the following reasons:

- i. The major requirements are there – bees and massive forage
- ii. Cost to start beekeeping project is very low
- iii. There are technical extension officers who can help with the project from the government side
- iv. The communities can be offered basic training and improve their beekeeping skills whilst the project is in full swing.
- v. There are not much overheads that will require the communities to spend money before realizing their harvests and sale of the honey.
- vi. The level of deforestation is alarming with people trying to earn a living from selling firewood and charcoal. Beekeeping can be an immediate intervention measure to provide alternative source of income for many rural communities currently depending on charcoal and firewood.

Thus, the following recommendations are put forward for consideration:

Recommendation	Description	Action
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<p>Provision of Hives</p>	<p>The beekeepers affected do not have the capacity to replace the hives destroyed by cyclone. They desperately need urgent assistance for them to rebuild their livelihoods.</p> <p>Equally, those families whose livelihoods and homes were destroyed and see beekeeping as the alternative source of livelihoods need to be supported with hives.</p> <ul style="list-style-type: none"> • The number of hives need to be increased • The type of hives need to be modern technology that provide them with increased output compared to the traditional hives predominantly used. 	<p>Sourcing of funds for procurement of hives / timber for the production of hives.</p>
<p>Training</p>	<p>There is need for the beekeepers to be trained for them to be able to upgrade their beekeeping skills so they can maximize their bee colonies. Provision of hives alone will not be effective unless the beekeepers are well trained especially on use good beekeeping practices.</p> <p>The training required should cover the following aspects:</p> <ul style="list-style-type: none"> • Hive production • Beekeeping • Recordkeeping • Basic business Management 	<p>Provision of Training</p>

Provision of Equipment	Beekeeping equipment especially the protective gear is required. Most of the beekeepers are risking and working at night without proper protective clothing. Some beekeepers are using old tyres for harvesting thus affecting the quality of honey.	Need to supply bee suits and smokers
Processing Centre	A processing centre is needed in Sussundenga District / in the beekeeping zones so that the honey is aggregated and processed close to the beekeepers thus value adding the honey before it is transported to Chimoio or Beira.	Processing Centre with honey processing equipment
Market Linkages	Beekeepers require a constant market for their honey. Better prices are also ideal so as to motivate beekeepers to engage in commercial beekeeping.	Establishment of markets for the honey

8. Pictures in Perspective

The following pictures provides insight into the meetings:



Picture above: The team with Nyanguzwe Beekeepers



Picture above: The Nyanguzwe Beekeepers Association Chairman showing plants pulled down by strong winds



Picture above: The team with Zombe Beekeeping Group



Picture above: Temporary shelters for families whose homes were washed away



Picture above: Stretches of extensive bee forage from Sussundenga District Offices to Chimanimani Area that can support commercial beekeeping initiatives.

9. Special Thanks

The Regional Commission President would like to make special mention and appreciation to Solidaridad for facilitating the visit to Mozambique and ensuring the right offices are visited for permission to access the affected areas, hoping the relationship established will continue to the levels where beekeeping will be a strategic sector in the rebuilding of communities in Manica as well as other districts with potential to do honey production in Mozambique. Beekeeping has massive potential to transform rural Mozambique to levels of export earnings and partners such as Solidaridad and Apimondia will help communities fully exploit their natural forests and bees in a sustainable manner.

Special thanks also goes to the Mozambican government officials who facilitated the smooth movement of the team to reach to the affected areas. Without their guidance and support, the visit will not have been successful.

10. Report Compiled by:

David Mukomana



President - Apimondia Regional Commission for Africa

Tel: +263 73 377 8924

+267 75 605 725 (*WhatsApp only*)

e-mail: dmukomana@gmail.com

Website: www.apimondia.com