

PDRA Snapshot
Karina / Caritas Keuskupan Maumere
Magepanda Village

Village profile – Magepanda

Magepanda is part of Magepanda sub-district, at the north side of Sikka district.

Community that lives in Magepanda is a mix from different ethnicities : Bugis, Lio Mego , Lio Lise, Krowe (Tebuk, Nita, Sikka, Koting). Magepanda village is 27,01Km2 and the population about 3.196 people (Man : 1,570 , Woman : 1.626) with people density 118,33jiwa/km2 (BPS Sikka - 2010). Type of livelihoods in Magepanda village 80% of its population is farmer and the rest are civil servant, teacher , health staff, fishermen, Carpentry , driver, and motorcycle ojek. Type of commodity and crops are coconut, cacao and cashew nut. There is also small and big cattle husbandry and nursery for cows , buffalo, horse, goats, pigs and fishery.

Magepanda boundaries :

- North : Sawu Sea
- South : Done village
- East : Kolisia village
- West : Reroroja village

Number of hamlet in Magepanda are four (4):

1. Kampung Baru : 797 (Man : 338, Woman : 409)
2. Mage Ndero : 1088 (Man : 545, Woman : 543)
3. Rate Gulu : 728 (Man : 328, Woman : 400)
4. Kolibewa : 704 (Man : 353, Woman : 351)

PDRA Activities

The purpose of PDRA is to assess hazard risk, vulnerability and capacity in participative way. To facilitate community to identify and assess issues that community facing and to find out why its happened. To facilitate community to identify potential that they have in order to answer/ find solution on their problem based on their potential. The result that came from PDRA will be used as basis for community action plan and community preparedness in DRR.

Tools that were used in PDRA activities were as follow :

- A. Hazard assessment
 1. Village history
 2. Disaster history
 3. Trend and changes
 4. Seasonal calendar
 5. Hazard Rangk
 6. Problem tree
 7. Hazard Characteristic Matrix
- B. Vulnerability assessment
 1. Vulnerable group Ranking
 2. Vulnerability ranking
- C. Capacity assessment
 1. Individual and community capacity Matrix



Venn diagram in Magepanda

2. Venn Diagram

- D. Ecosystem assessment
 - 1. Ecosystem questionnaire
 - 2. Change of ecosystem matrix

PDRA activities in Magepanda started from 14 January - 19 May 2012, attended by 201 participant. PDRA activities in Magepanda village were held in four (4) sub-village : Kampung Baru, Mage Ndero, Rate Gulu and Kolibewa.

Based on hazard assessment , it was found out that main hazard community facing is : flood from the river passing the village that impact 4 sub-village and happened every year for the past ten to five years. Floods due to deforestation – slash and burnt for opening new land for farming, shifting cultivation , tree in the forest reduced, only 60% in the past 5 years. Floods damaged ecosystem , paddy field , community garden, community crops and commodities damaged as the floods also caused water reached community garden and paddy field. Community livestock suchs as cows, goats, pigs, ducks , chicken some died, got swept away and drowned, one people died (in Kolibewa) and three died (in Rategulu), the water level during floods could reach up to people head (adult) (1,5 – 2 m high), community can not go to their garden or paddy field, road access also become impassable as water flooded the road. Access from Magepanda to Gera village (neighboring village) also got cut , children can not go to school.



PDRA session in Magepanda

Village population gradually increased, 30 years ago about 1,900 people and 20 years ago increased to 3.416 , and for the past five years become 3,355 people . 30 year ago, many people still living in the mountain, people that lived in the village around 60 HH /20 houses. Children at school age were less in school but helping their parents in the garden. People can live up to 100 years of age. In the past 20 years ago people who lived in the village

started to increase from 100 HH to 180 HH and gradually increasing more over years, level of education people vary from primary school and junior high school, age could reach 80 years old, many people left village due to population growing and make less land either for farming and housing, people left village looking for better living and income some left to Batam, Makassar.

Social and financial network :

Farmer income is difficult to measure as for daily live consumption they depend from crops they planted (corn, cassava, banana) and for commodities also depends on how many they can get from their trees. Farmer sometimes didn't have cash in hand but they will have cash when they sell their crops (seasonal or commodities) and usually the money they get will be used to buy non agriculture products. Barter system use also within the people inside the village.

Market in Magepanda : in addition to Magepanda market that open every day, other market that also near by village is Lopa and Pasar Baru market. These two markets visited by people not only from Magepanda village but also from other areas as its located near big road. Where many transactions taken place with more high price. Transportation to go this market from Magepanda could use ojek and trucks.

30 years ago no credit union or circular group that they can keep their money and use it when they need (arisan) exist in the village. Pawn shop and sharkloan started to exist ten years ago. Farmer income is difficult to measure as for daily live consumption they depend from crops they planted (corn, cassava, banana) and for commodities also depends on how many they can get from their trees. Farmer sometimes didn't have cash in hand but they will have cash when they sell their crops (seasonal or commodities) and usually the money they get will be used to buy non agriculture products.

But since 20 years ago CU started to exist and arisan group growing Credit union started to establish.

30 years ago no infrastructure seen in the village, road still pathway without asphalt, transportation by horse, no health clinic. Elementary school exist 20 years ago. 10 – 5 years ago permanent building started to grow, elementary school now 2 units, one junior high school, one junior high school, one kinder garten/early education unit, health unit (Posyandu 4), more permanent building/houses, parish complex, electricity. Transportation started to improve, asphalt road.

In the event of disaster, during floods, there were also division of role and responsibilities between women and men group that can be taken:

Women group: taking care of the children, saving valuable house properties, remind their husband to be careful and to be alert and warn kids so they not go swimming in the river, preparing meals during disaster in the IDPs centre, move cattle to safe place. Women: Has solidarity to help others other also, preparing meal for other people, crying.

Men group: save cattles or move them from the river banks to safe place, mobilize villagers to be evacuated to safe place, save the difable/mental illness people, preparing meals, save human being as well as valuable properties, remind their children so they will not swimming in the river, shifting their family to safe place and preparing the IDP centre. Men group considered that they can help others, has solidarity to work together with other ethnics, they can also facilitate to get vehicle to transport people if they get sick or giving birth. People who owned store / supplier, as part of solidarity during disaster, they also help by giving credit for food supply for family that need it.

A part of individual role, there is organization role and function also identified during capacity mapping assessment:

- Parish: hall and building, parish facilities can be used as IDPs centre, priest also ready to visit communities and encourage community to be more strong.
- Health clinic (Polindes /Puskesmas): Building can be used for people who need medical treatment, medicines and first aid provider, provide health service and willing to help community
- Sub-district office: they have vehicle and other facilities that can be used during disaster.
- Village office: building and facilities can be used for people who need it during disaster, village staff help community and has authority to distribute food and non food item, bring community together.
- Gapoktan: provide service and help community related to agriculture (fertilizer, pesticides and seeds supplier)
- BPD: Together with village staff coordinate food and non food items (in Kolibewa and Magendero sub-village), but in the other two sub-village (Rategulu and Kampung Baru) BPD didn't have role and function.
- PPL (Agriculture unit): they help farmer and non farmer group (kolibewa and Magendero) during disaster but in Rategulu and Kampung Baru they only help farmer group.
- Plan Internasional: recognize can give fast response with regards to child welfare.

- Parish/CKM : recognize can give fast response in distributing food and non foods items including provide shelter. Working with community on rehabilitation. Praying group to give strength to community.
- PNPM : provide support with regards infrastructure and road facility
- OMK (organisasi muda katholik – Catholic Youth Group) : provide human resource to support village staff during disaster
- Dian Desa : No role and function in Magepanda village.
- CU: Helping community economy .
- PKK Desa (Women Welfare group) : No role and function.
- Sub-district staff : to coordinate with village staff and field visit.
- Biara susteran/ Nun : provide support to public kitchen during disaster.
- Lembaga adat /traditional institution: Perform traditional / custom ritual (pest exorcist, build house), enforcing traditional law.

From the above explanation it can be described role of various stakeholders and function towards Magepanda community such as : Village staff, Parish, Health clinic (Puskemas/Posyandu) play significant role in the village and closed to community, with regards to community welfare especially during disaster event. Other stakeholders such as Gapoktan and PPL in Magendero and Kampung Baru sub-village, both closed to community and not only provide support to farmer group but also non farmer group in the community but the other two sub-village (Rategulu and Kolibewa) they only support farmer group. While the rest of stakeholders PNPM, Plan International, BPD, OMK, Gapoktan, CU, Nun monestry , sub-district staff, custom institution their contribution also considere significant with community.

Condition of the village :

Paddy Field :

The rice production in the sawas has also changed considerably. In the past planting of rice could be done in December. They used local seed. The rice didn't get sick easily can be stocked for long term period as food stock and seed for their next plant, their local prediction when to start planting sufficed. They use buffaloes to plough. In the past harvest once in a year and its enough for house hold consumption throughout the year before next harvest. Their local seed took 6 months to produce, and didn't need a lot of water.

Now planting cannot be done till February due to a different rainy season. Ploughing done by tractor , community who doesn't have tractor will rent it from the farmer that own it. They feel ashamed if they still use a buffalo. However, the use of a tractor is expensive because the rental fee and also to buy diesel for the engine. They have to use a different variety of rice advised by the government. The seed has to be bought, they cannot keep seeds for planting in the next season as the it not be kept for long time. This rice variety requires the use of insectices and fertilizers to boost production . Also this is more expensive. Because community has to buy seeds everytime they want to start planting since the seeds can not be kept for long time, they have to buy pesticides and also buy fertilizer at the same time. In the past , rice/seeds span more long, can be kept for food stock, they didn't have to buy new seed because seeds can be kept for long time. It doesn't need pesticide or fertilizer also. But quality of the rice using new seed is good and there's a market for it. People like to buy new variety rice and less market for local rice variety, customers want to buy only the new variety.

Paddy fields are reduced, partly because of erosion as it located near the river, partly by the widening of the river by sand and stone mining for the past 10 – 5 years and partly by dividing the available land among children. This leads to less land per person. In the past usually only 1 harvest per year.

These days a second produce is possible, with a variety of rice that grows in 3 months, with irrigation, using a generator to pump water from the river. The cost for rice production is much higher now: generally out of 3 saks of rice produced, 1 is needed to cover the cost for the tractor (rental and buy diesel for the engine), to buy pesticides , fertilizer and seeds.

A connected problem is the illness of ducks. Ducks eat the remainders in the sawas after the harvest. Due to the use of pesticides they get sick frequently. This didn't happen in the past.

River : 30 years ago it was a steady stream, rather undeep, clear, with a good ecosystem, with fish, eel, shrimps, and stones on the riverbed, around 5 meters width, with trees on the riverbanks. There were 2 streams of river flows , its narrow and the water level almost as high as the paddy field. Plenty of water springs.

Gradually this changed over the years: 20 years ago the river was 7 meters wide, the water level being lower but still clear, still with sand and rocks at the riverbed and still fish. The water however is not drinkable anymore but it can be used for bath or cattle. In the past five years , in Kampung Baru sub-village, the river has been without water for three years. Then it has water that last for 3-4 months .

Around ten to five years ago companies (govt) started sand and stone mining, initially with manpower only, removing sand and stones and now they use trucks to transport it.

In 2005 there was a drought, the river didn't even provide water after digging. Now the river is 20 m. wide, the riverbanks are eroded and used by community to put their cows , greenery along the river is consumed by the cows, the trees have been washed away by the floods. Some parts of the year there is water, some parts provide water for 2 months and some parts there's nothing. Sand mining is done with tractor. Flooding is a problem during the rainy season. Water level during flood can reach up to adult head and above (1,5 to 2 m high) Community livestock suchs as cows, goats, pigs, ducks , chicken some died, got swept away and drowned, one people died (in Kolibewa) and three died (in Rategulu), the water level during floods could reach up to people head (adult) (1,5 – 2 m high), community can not go to their garden or paddy field, road access also become impassable as water flooded the road. Acess from Magepanda to Gera village (neighboring village) also got cut , children can not go to school

Forest:

In the past , 30 years ago, forest were full with lots of vegetation and big trees, many birds , monkeys, wild boar and deer in the forest. But the past 10 years forest condition changes many trees cut to build houses or because new road / access. Slash and burnt by community to open new land for farming, shifting cultivation, and also sand and stone mining has started and also many community farming in hilly side without making terracing. In the past 10 – 5 years 60% of forest has gone due to the above activities.

In the past a different agricultural system was used, shifting cultivation, cutting the forest to produce crops. This has changed to permanent agriculture though not all farmers and this aimed to protect the forest. This because agriculture unit from government started socialization for the past 5 years so community will not use slash and burnt system anymore.

The whole area where the village now is situated, was originally forest, a swampy area. They all migrated here in a government programme many years ago, the government providing them with houses. There were buffaloes, deer, forest pigs , monkeys, birds , cacatoes in the forest. Now the deer are gone, few pigs are left, monkeys and cacatoes reduced.

Villagers sometime hunted wild boar , buffalo for their consumption or they sell the meat for income.

In the forest there are 2 types of trees, planted ones and original ones. People planted the cashew and kemiri nuts, cocoa, coffee, bamboo. These are generally used as cash income to pay for school fees as other seasonal crops such as corn, cassava, banana they use for daily food.

Marketing is a problem, especially because there's no road from the forest to the market in the past, barter system were used within the community inside the village.

But for the past 10 years access to market in the village or outside village is more easy, especially where ojek and transportation are now improved.

Community use land and stone for various type of function : bricks making - clay from the soil they use to make bricks , pottery for kitchen use and some parts of the land they use for cemetery .

They use stone to pound corn to make corn flakes (jagung titi), and to sharpened the knife.

Condition related to climate :

- Commodity crops such as cashew and candlenut production not good. This mainly due to intense rains during rainy season that cashew flowers and nuts got swept away before ripe/harvest time and it fallen. Candle nut production also reduced due to no proper treatment and also the age of the tree and pest.
- Farmers confused toward weather patterns : drought and rainy season become unpredictable , they not sure when to start preparing the land and plant it and when will be the harvest time.
- Farmers are now confused toward weather patterns : Farmer group in the village in Sikka district , usually use their traditional knowledge to do farming, determine rainy season to start preparing land for farming and predict winds based on experience. But last year rains from November – and in April still continue though not very intense. The dry and rainy seasons become unpredictable, they not sure when to start preparing the land and plant it and when will be the harvest time. Farmers in Sikka usually use their traditional knowledge of the farming system, signs such as rainy season and wind force as indicators when to plant, this is based on their experience. But the unpredictable weather condition made their knowledge less useful..

After completing their PDRA session , villagers started to establish community organization.

On 14 June 2012 there were meeting held with the community and it was agreed that community will not establish new community organization to implement DRR/CCA/EMR activities , but will use the existing CO – GAPOKTAN (Gabungan Kelompok Tani – Farmer Group Association) and will add three unit under GAPOKTAN. : Emergency Response, Community Relations and Rehabilitation. The core member will be GAPOKTAN core member, but in this meeting they had not identify member under each unit yet. The planned is to invite community representative from each sub-village under each unit/section.

Below are the list of recommendation as based on PDRA activities conducted with community in Magepanda:-

1. Preventive action for floods and ecosystem
 - Reforestation, tree planting near the river banks , terracing, land conservation, river normalization , Wells for water reservoir (need further assessment whether it will be for house hold or at wider target)
 - Water catchment in the slope area (need further assessment on the coverage and depth and wide)
 - Village regulation with regards ecosystem management : to stop slash and burnt to open new farming.
 - Socialization on ecosystem management – movie showing on environment and its impact to community
 - Socialization on ecosystem management at elementary school (SD)
2. Mitigation action for floods
 - Planting tree /bamboo near the river bank

- River normalization (needs further consultation with appropriate resource to done)
- 3. Emergency Response and Preparedness for Floods
 - Early warning sign and signal
 - Evacuation route and evacuation centre to be identified
 - Post coordination (Posko) in Fata
- 4. Capacity building on integrated agriculture for community , as follows:
 - Good terracing , land and water conservation
 - Good seed and seedling
 - Organic agriculture and fertilizer
 - Good animal husbandry
 - Spring water conservation
 - ER training for ER team
 - ER simulation

In June 2012 Karina and Caritas Maumere as a part of regular accompaniment activities reviewed the PDRA tools which integrate CCA and EMR and also how they were used. It is recognized that to ensure full participation of communities, which are spread across the large geographical area of villages both the socialization and the PDRA were repeated in each hamlet (rather than just each village) and activities were organized around the community farming activities. This resulted in postponing meetings during the planting and harvest times. Community facilitators also recognized the importance of villagers themselves in planning the process of PDRA, and this increased participation. Support from the village leaders, the diocese, and priest was very important. They were actively involved in the process, and priests encouraged their congregation to participate. They also provided support such as meals and stationary for meetings.

For certain ethnic , they were not comfortable meeting in the same place with other ethnics – therefore facilitators approached community leaders so no people feel left out from the process.

Although the many tools used allowed for a deeper collection of information, it also meant that the process to engage communities in the assessment was very long; facilitators needed to be very creative to maintain the motivation and enthusiasm of the community during the entire process. Together they have started modifying their PDRA tools to consolidate and reduce number of tools used based on the experience of implementing this PDRA process, they are merging tools to increase efficiency in use with communities, and are modifying tools to make more appropriate to the local practices and traditions in the community. Modified tools will be utilized with an additional 3 parishes in 2013.