



2013-2014 Plan Vivo Annual Report

Mikoko Pamoja

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22 December 2014



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Acronyms used in this report

ACES	Association for Coastal Ecosystem Services
CFA	Community Forest Association
ESPA	Ecosystem Services for Poverty Alleviation
GOGACOFA	Gogoni-Gazi Community Forest Association
HMP	Hazina ya Maendeleo ya Pwani
KCDP	Kenya Coastal Development Project
KFS	Kenya Forest Service
KMFRI	Kenya Marine & Fisheries Research Institute
MPCO	Mikoko Pamoja Community Organisation
MPSG	Mikoko Pamoja steering group
NGO	Non-governmental Organisation
WWF	World Wide Fund for Nature

Summary

Project overview	
Reporting period	1 st October 2013 – 30 th September 2014
Geographical areas	Gazi Bay mangrove forest
Technical specifications in use	Mikoko Pamoja

Project indicators to date (reporting period end)	
No. smallholder households with PES agreements	0
No. community groups with PES agreements	1
Approximate number of households (or individuals) in these community groups	498 households
Area under management (ha) where PES agreements are in place	117.4 ha
Total PES payments made to participants (USD)	11,984
Total sum held in trust for future PES payments (USD)	6250
Plan Vivo Certificates (PVCs) issued to date	0

Project activity this reporting period	
No. smallholder households with PES agreements signed	NA
No. community groups with PES agreements signed	1
Approximate number of households (or individuals) in these community groups	498 households
Area put under management by participants with PES agreements this year (Ha)	117.4
Plan Vivo Certificates (PVCs) requested for issuance this reporting period	2125

Part A: Overview

A1 Key events

3rd October 2013- The forest management agreement between Kenya Forest Service (KFS) and GOGACOFA was signed. MPCO being one of the user groups under the CFA is a beneficiary from agreed user rights. The agreement provided tenureship of a designated area of mangroves of Gazi bay by MPCO.

16th January 2014 and 18th March 2014- Community consultative meetings (community *barazas*) between MPSG and the community members were convened. These meetings allowed prioritization of community development projects to be supported through revenue generated from the sale of carbon credits.

29th February 2014 - the global director of UK's Ecosystem Services for Poverty Alleviation (ESPA) Program, Prof Paul Van Gardingen, graced a ceremony for the donation of education materials to the different primary schools at Gazi bay. 150 textbooks were purchased and distributed to Makongeni primary school, while Gazi primary school received roofing materials and games kit for the school. These are the first fruits in terms of community development realized from carbon earnings (paid from start-up funds contributed by Aviva Ltd).

A2 Successes and challenges

The project was found to be conforming to Plan Vivo systems & standards by the Plan Vivo-approved validator in 2013.

1st January 2014- The project received its first payment in return for meeting monitoring and social targets; money for this came from start-up funds provided by Aviva Ltd.

3rd April 2014- The project went through a transition phase, recruiting a new project coordinator to oversee the day-to-day operations of the project after the previous coordinator Ms Mwanakombo got a new job.

7th April 2014- MPCO received additional funding of US\$ 5500 from World Bank's funded Kenya Coastal Development Project (KCDP). The funds will be used to construct a watchtower for improved surveillance of the community managed mangrove forest. Improved surveillance will lead to enhanced mangrove productivity and integrity.

7th September 2014- Mikoko Pamoja is working closely with like-minded partners to enhance payment for ecosystem services of Gogoni-Gazi forest ecosystem through the creation of awareness among members and the community. WWF has launched a project that will promote the use of energy saving *jikos* and solar heating systems. These clean energy initiatives come at a time when forest products are dwindling mainly because of exploitation of mangroves for firewood. Introduction of energy saving stoves should reduce pressures on natural forests, including mangroves.

Challenges

- I. The biggest challenge facing the project is poaching of mangroves in and around the project area by licensed and un-licensed cutters. This problem has been aggravated by lack of clear demarcation of the project area. However, KFS in collaboration with KMFRI have organized for a zonation exercise of the Gazi bay mangroves involving all stakeholders which is to take place later in the year. The aim of this zonation is to clearly designate the areas to be utilized

by the different user groups under GOGACOFA as detailed in the management plan and as a result prevent potential resource use conflicts.

- II. Lack of precedence and experience in the processes involved in the implementation of a community project inside Government gazetted forests. This has resulted in delayed approval of funding from other sources, affecting the construction of the watchtower.
- III. Changing rainfall patterns have delayed and shortened the mangrove planting season impacting a key project activity.
- IV. Unprecedented sedimentation in the planting sites has also led to significant mortalities of planted mangrove seedlings. This is a big concern as shoreline change is a phenomenon the community cannot easily comprehend.



Sedimentation at the planting site (such events increase mortality of natural and replanted mangroves)

- V. The transition period in recruiting a new project coordinator resulted in delayed implementation of this year's workplan. The new project coordinator has been working closely with KMFRI personnel to achieve project targets and results in good time.

A3 Project developments

This was our first full year of operation; so there were no changes to the PDD, risk assessment or technical specification this year.

A4 Future Developments

Our plan was to establish the feasibility and credibility of Mikoko Pamoja by achieving successful sales and disbursement of money for the area of forest currently protected. We then intend to negotiate a gradual increase in the protected area to ensure increased income. We hope to start this process during 2014/2015.

Part B: Project activities

B1 Project activities generating Plan Vivo Certificates

Mikoko Pamoja has a single technical specification that covers three activity areas, involving avoided deforestation/forest recovery activities in areas 1 and 2 and planting activities in area 3. The responsibilities for and benefits from these activities are shared communally with the single project community organisation.

Table B1: Project activity summary

Mikoko Pamoja	Area (Ha)	No smallholder households	No Community Groups
<i>Natural mixed forest (Activity Area 1)</i>	107	498	1
<i>Indigenous plantation (Activity Area 2)</i>	10	498	1
<i>Degraded beach site (Activity Area 3)</i>	0.4	498	1

B2 Project activities in addition to those generating Plan Vivo Certificates



Village and beach clean-up during World Oceans Day

On 8th of June 2014- MPCO celebrated World Oceans Day under the theme, *“Sustainability- together let's ensure that oceans sustain us into the future”*. The activity involved a cleanup exercise in both Makongeni and Gazi villages and at the beach. 140 adults and children from schools, NGOs and government agencies attended the event.



The team involved in the clean-up at Makongeni village

In addition, an essay writing and artwork competition was conducted and the winners awarded. These activities all aimed to help create awareness of the value of our oceans to biodiversity, climate and community livelihoods and their sustainability.



Winners in the essay writing and artwork competition pose for a group photo

During the same reporting period, community groups from Lamu, Embu and Kiambu counties visited our Project to learn from our experiences in implementing a carbon offset project.

Part C: Plan Vivo Certificate issuance submission

C1 Contractual statement

This issuance is based on signed PES agreements with participants complying with all the minimum requirements stated in these agreements.

C2 Issuance request for projects where issuance is made on the basis of ongoing activities on land already managed by the project (e.g. avoided deforestation, calculated ex-post)

Table C2a: Statement of tCO₂ reductions available for issuance as Plan Vivo Certificates based on activity for reporting period 1st October 2013 – 31st September 2014

Area ID	Total area (ha)	Tech. Spec	tCO ₂ available from previous periods	Total tCO ₂ achieved this period*	% Buffer	No. of PVCs allocated to the buffer account	No. PVCs requested for issuance from saleable carbon	tCO ₂ available for future issuances
Area 1	107	Mikoko Pamoja	na	2243	15	337		
Area 2	10	Mikoko Pamoja	na	210	15	31		
Area 3	0.4	Mikoko Pamoja	na	47	15	7		
Total	117.4		0	2500		375	2125	0

* Number of tCO₂ sequestered or avoided emission through participants' activities this reporting period.

Table C2b: Allocation of issuance request

Buyer name/Unsold Stock	No. PVCs transacted	Registry ID (if available)	Tech spec
Earthwatch Institute	1000	n/a	Mikoko Pamoja
Paolo Merlini	10	n/a	Mikoko Pamoja
Association for Coastal Ecosystem Services	1115	103000000005489	Mikoko Pamoja
Total	2125		

C3 Data to support issuance request

Please refer to Annex 1

Part D: Sales of Plan Vivo Certificates

D1: Sales of Plan Vivo Certificates

Table D1: Sales of Plan Vivo Certificates

Vintage	Buyer	No of PVCs	Price per PVC (\$)	Total sale amount (\$)	Price to participants per PVC (\$)	% Sale price received by participants
2014	Earthwatch Institute	1000				88
2014	Paolo Merlini	10				88

D2: Unsold stock available for sale

Table D2: Unsold stock of Plan Vivo Certificates

Vintage	No of PVCs	Price to participants (\$ per PVC)
2014	1115	10

Part E: Monitoring results

E1: Ecosystem services monitoring

Monitoring results that support the request for new issuances are presented in annex 1. Monitoring targets were met for all activity areas in the period 2013/2014

E2: Maintaining commitments

No participants have resigned from the project this year

E3: Socioeconomic monitoring

Initial payments – funded from start-up funds - were disbursed to the two villages involved in Mikoko Pamoja Community Organisation this year – further information is given in part F.

E4: Environmental and biodiversity monitoring

See Annex 1 for monitoring results. Successful forest protection and replanting will result in a range of ecosystem benefits, but these will not become manifest for a few years.

Part F: Impacts

F1: Evidence of outcomes

During the reporting period, the same benefit sharing scheme was used. Both Makongeni and Gazi villages received Ksh.152,905.00 each as direct payments for community projects. The funds were used to purchase new text books for Makongeni School; whereas for Gazi village the support was used to rehabilitate the roof as well as purchase sporting equipment for the local primary school (details of receipts and labour costs are included in annex 3). This will help to improve education standards in the local schools and give them a competitive edge in the national examinations.



Distribution of books bought by MPCO carbon funds to Makongeni Pri. Sch. by
ESPA Global director, Prof. Paul van Gardingen (second left)



Roofing materials and soccer equipment bought by MPCO carbon funds
at Gazi Primary School



Roofing works funded by MPCO at Gazi Primary School

The presence of the project has promoted mangrove ecotourism and integrated aquaculture activities around the project area. This has further contributed to improvement of the living standards in Gazi Bay community and has enhanced community understanding of the true value of the mangrove ecosystem and the need for its conservation.

The technical team involved in supporting this project have published two important scientific papers this year dealing with emissions from degraded forests and the key advantages of using PES in mangrove conservation:

- Langat, J., Skov M.W., Kairo, J., Mencuccini, M. Bouillon, S. Waldron, S. and Huxham, M. (2014). Rapid losses of surface elevation following tree girdling and cutting in tropical mangroves. PloS One DOI: 10.1371/journal.pone.0107868
- Locatelli, T., Binet, T., Kairo, J., Patenaude, G., King, L., Madden, S., Upton, C. and Huxham, M. (2014) Turning the Tide: How payments for ecosystem services (PES) might help save mangrove forests. Ambio 43, 981-995. DOI 10.1007/s13280-014-0530-y

Part G: Payments for Ecosystem Services

G1: Summary of PES by year

Payments made in the previous year came from start-up funds and not from sales of PVCs, but were distributed in accordance with the PDD and Technical Specification and in line with the terms of PES agreements signed. This was a planned phase of the project to allow all participants experience of how it would run in the future.

Table G1: Summary of payments made and held in trust

1. Reporting year (mm/yy - mm/yy)	2. Total first year payment	3. Total ongoing payments	4. Total payments made (2+3)	5. Total payments held in trust	6. Total payments withheld
10/13-9/14	\$11,984*	na	\$11,984	\$6,250**	0

*Total anticipated funds per year from PVC sales is \$12,749. After deduction of issuance fees, this leaves \$11,984 available per year for transfer to the Mikoko Pamoja Community Organisation

**Before transfer to the Mikoko Pamoja Community Organisation, funds are held by the charity Association for Ecosystem Services. As of Dec. 2014 there was £3,874 held in the ACES account.

Part H: Ongoing participation

H1: Recruitment

As this is the first Annual Report and issuance, there were no additional participants added this year.

H2: Project Potential

We have deliberately started on a small scale. The intention is to expand the area of forest under active management once all stakeholders have seen the initial success of the project and provided PVCs can be sold. So given these conditions we hope to start negotiating an additional 50 ha this year.

H3: Community participation

The Forest Act (2005) provides for participatory forest management of state forests. The launch of the participatory forest management plan and signing of the management agreement between KFS and GOGACOFA allows the community to jointly manage the natural forests within and adjacent to Gazi bay for environmental sustainability and societal benefits. MPCO, being a user group of the CFA, is entitled to benefit from this legal framework, enhancing sustainability of the project.

MPCO works closely with other user groups within GOGACOFA by conducting activities that aim at community benefits from the protection and conservation of the mangroves of Gazi bay. These activities are in line with the objectives of GOGACOFA, whose main aim is to enhance forest productivity and improve community wellbeing at Gazi bay. MPCO has put in place structural frameworks that promote and reinforce community participation in the Project.

The MPCO constitution qualifies members as those above 18 years of age and coming from Gazi and Makongeni villages. The project is managed by a Project Implementation Committee (PIC) that is democratically elected by the community members. During the reporting period, MPCO organized several meetings with the community and other stakeholders of the Gazi bay ecosystem (Table H3).

Table H3: Meetings held by MPCO 2013/2014

Date	Name of meeting	No. attended	Remarks
27 th December 2013	Committee	10	KCDP subcommittee were formed MPCO funds received
7 th March 2014	Committee	5	Screening of Coordinator application forms
18 th March 2014	Gazi community Baraza		Discussion on community projects for Gazi
17 th April 2014	Committee	12	Planning on projects activities Change of signatories
10 th May 2014	Committee	9	Planting planning Delivery of Gazi Primary school renovation materials
10 th June 2014	Committee	9	Planting planning
16 th July 2014	Committee	12	KCDP Grant implementation planning
6 th September 2014	Committee	10	Financial report represented to the committee Project progress Planting planning
27 th September 2014	Committee	7	Nursery establishment planning Monitoring activity planning

Community meetings in Gazi and Makongeni were held during the reporting period in order to prioritize potential community projects for funding through carbon funds. Involving the community in the decision-making process has allowed for transparency and accountability, ensuring sustainability and stewardship of the project.

Part I: Project operating costs

I1: Allocation of costs

All expenditure this year was met from start-up funding not from PVC sales

Table I1: Allocation of costs

Expense	Narrative	Amount (\$)	Contribution from sale of Plan Vivo Certificates	Contribution from other sources
Community development projects	New school roof, sporting equipment, school books etc	3,436	-	100%
Labour	Workteams for planting and monitoring	3,161	-	100%
Project worker salary		2,627	-	100%
Expenses for committee and office		518	-	100%

Annexes

Annex 1. Monitoring results for issuance request

The project operates in three areas; Areas 1 and 2 deliver PVCs through avoided deforestation and forest conservation activities. Area 3 involves planting trees in degraded beach sites that used to support mangrove forests. 90% of the PVCs are generated through activities in Areas 1 and 2.

Forest protection and surveillance (Areas 1 and 2)

MPCO has been working to strengthen ties with Kenya Forest Service. This has enhanced forest surveillance and policing, resulting in a decrease in illegal harvesting. During the reporting period the number of harvesting stumps had significantly reduced while juvenile density had increased; these are the key monitoring data agreed in the project design document (Table X1). Based simply on stand data, MPCO has not experienced any serious illegal harvesting in its project areas during the reporting period and forest condition can be said to be recovering.

Table X1: Stump count and regeneration levels in Mikoko Pamoja project areas

Activity area	Forest attribute	Quantity (no./ha)	Baseline	Remarks
1	Stocking rates (for trees with dbh > 2.5cm)	3,931.81		Reference plots show no signs of new illegal cutting and good evidence of regeneration, meeting the annual monitoring targets
	Natural regeneration	39,622.73		
	Mean stump density	995.45	2720	
2	Stocking rates (for trees with dbh > 2.5cm)	2,625.00		Reference plots show no signs of new illegal cutting and good evidence of regeneration, meeting the annual monitoring targets
	Natural regeneration	2,825.00		
	Mean stump density	583.33	778	

With support from KMFRI, MPCO applied for extra financing from KCDP to improve community forest surveillance through the construction of forest watchtowers. The Steering Committee of MPCO has approved the activity awaiting tower designs from KFS.

Tree planting (Area 3)

MPCO is committed to plant 4,000 mangrove seedlings per annum for the 20 years contracting period. During the reporting period 2,842 seedlings of *Sonneratia alba* were planted in project area 3, representing 70% of the target at this site (Table X2). Since the objective of rehabilitation was for coastal protection, all planting was carried at a spacing of 0.5 m x 1.0 m, representing a stocking rate of 20,000 seedlings/ha. The survival rate of these newly planted mangrove seedlings was 92% after three months.

Table X2: Number of seedlings and the date they were planted

DATE	SPECIES PLANTED	NUMBER PLANTED
15 th May 2014	<i>Sonneratia alba</i>	530
2 nd July 2014	<i>Sonneratia alba</i>	644
3 rd July 2014	<i>Sonneratia alba</i>	612
26 th July 2014	<i>Sonneratia alba</i>	400
27 th July 2014	<i>Sonneratia alba</i>	250
13 th Sep 2014	<i>Sonneratia alba</i>	406

TOTAL	2,842
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While the MPCO had planned to meet the 4000 seedlings planting target using *Sonneratia alba*, this was not possible for a number of reasons:

- Unprecedented changes in rainfall patterns delayed and shortened the planting season
- Unprecedented sedimentation in the planting sites has also led to significant mortalities of planted mangrove seedlings
- Reduced number of mangrove seedlings in the community nursery

To counter the shortfall, MPCO collaborated with the host Community Forest Association and KMFRI in replanting other mangrove species in degraded sites of the bay at Makongeni. At least 3,331 seedlings of mangroves (*Ceriops tagal* and *Avicennia marina*) were planted at a spacing interval of 0.5 m x 1.0 m representing a stocking rate of 20000 seedlings/ha (Table X3). These species were planted here as they are adapted to the site conditions; *Sonneratia alba* is a low water species that grows at the seaward edge of mangrove forests and cannot survive high tidal sites such as the alternative area used. Both the original beach site and the alternative site are degraded areas that once supported healthy mangrove forests.

Table X3: Mangrove seedlings planted in Makongeni area of Gazi bay

DATE	SPECIES PLANTED	NUMBER PLANTED
26 th May 2014	<i>Avicennia marina</i>	1,208
27 th May 2014	<i>Avicennia marina</i>	804
28 th May 2014	<i>Ceriops tagal</i>	556
28 th May 2014	<i>Avicennia marina</i>	763
TOTAL		3,331

Hence 6,173 seedlings were planted in total, exceeding the target number by 2,173. Mortality rates were well below the target of 50%. So although the target was not met by planting *Sonneratia*, as originally planned, it has been exceeded through the use of two other indigenous species. Since *Avicennia* is a faster growing species total anticipated carbon benefits from tree planting will be exceeded for this year.

Annex 2. Impacts

These are described in the main report and are principally expenditure on new school infrastructure, new school books, sports equipment and forest conservation. In addition the project success has allowed the MPCO to apply for match funding for further activities.

Annex 3. Community meeting records (summary)

These are summarised in the report text and pasted as pdfs here:



MIKOKO PAMOJA COMMITTEE MEETINGS.pdf