



[Bahasa Inggris] [Indonesian]

Efforts to Increase Participation and Income of Communities to Support the Implementation of REDD+ in MBNP

The success of REDD+ program depends on community participation. To support the implementation of REDD+ in the national park through the program of "Tropical Forest Conservation for Reducing Emissions from Deforestation and Forest Degradation and Enhancing Carbon Stocks in Meru Betiri National Park", various activities have been and will be implemented as an effort to increase community participation and income. The activities have been carried out through:

Technical Training on Resource Based Inventory for Farmers. This activity is a part of community development activities so that community can identify their own potential land resources and utilise it optimally, therefore they can support sustainability of the forest. Training was conducted jointly by the Forestry Research and Development Agency (FORDA), National Park Meru Betiri and Faculty of Agriculture, University of Brawijaya. Two phases of training were conducted in May and July of 2011.

Training on Measurable, Reportable and verifiable (MRV) related carbon accounting was carried out in collaboration with the Faculty of Agriculture, University of Brawijaya under the leadership of Professor Kurniatun Hairiah. The training was held on 29-31 October 2010 at the Panorama Hotel Jember. The participants were given an understanding of climate change, the role of forestry and field practice for measurement of five carbon pools.

Forest protection training was conducted by the institution of MBNP on 10-11 November 2010 at Sulawesi Hotel Jember. This activity had objective to reduce illegal logging and land encroachment and other disturbances to the forest. This activity involved the Estate and Forestry District Office of Jember, and was attended by 30 participants. For two days, participants were trained how to protect the national park from any threats and disturbances by providing them with knowledge and skills such as investigation techniques, forestry counseling techniques, wildlife protection, national park management techniques and policies, as well as other materials.

Awareness raising seminar was held in October 2010 in cooperation with the Estate and Forestry District Office of Jember. The seminar attended by 85 participants had objective to increase public awareness and stakeholders of the importance of the MBNP.

To develop alternative income, a series of activities has been made to capture the aspirations of the community about the activities required by the community. The result of needs assessment was a description of the choices of activities that can increase income and reduce emissions or increase carbon stocks. Some activities choiced by the community include:

Development of agroforestry products

Activities of agroforestry products development include post-harvest handling and marketing. For the activities, procurement of vacuum frying to make jackfruit chips, equipment to process the herbs into instant powder and pressing tools for packing chips have been carried out. Procurement can be implemented, through the cooperation between the district offices of industry and trade, and Public Health.

Upaya Peningkatan Partisipasi dan Penghasilan Masyarakat untuk Mendukung Pelaksanaan Kegiatan REDD+ di TNMB

Keberhasilan program REDD+ sangat tergantung dari peran serta masyarakat. Guna Mendukung Pelaksanaan Kegiatan REDD+ di TNMB melalui Program "Tropical Forest Conservation for Reducing Emissions from Deforestation and Forest Degradation and Enhancing Carbon Stocks in Meru Betiri National Park", berbagai kegiatan telah dan akan dilaksanakan sebagai upaya Peningkatan Partisipasi dan Penghasilan Masyarakat. Kegiatan tersebut dilaksanakan dalam bentuk:

Pelatihan Teknik Inventarisasi Sumber Daya Petani. Kegiatan ini merupakan bagian dari kegiatan pemberdayaan masyarakat agar masyarakat dapat mengetahui potensi lahan yang dimiliki dan memanfaatkannya secara optimal, sehingga mereka dapat mendukung kelestarian hutan. Pelatihan dilaksanakan bersama oleh Badan Litbang Kehutanan, Balai Taman Nasional Meru Betiri dan Fakultas Pertanian, Universitas Brawijaya. Pelatihan dilakukan dua tahap pada bulan Mei dan Juli tahun 2011.

Pelatihan Measurable, Reportable dan Verifiable (MRV) terkait perhitungan karbon dilaksanakan bekerja sama dengan Fakultas Pertanian, Universitas Brawijaya di bawah pimpinan Profesor Kurniatun Hairiah. Pelatihan ini dilaksanakan pada tanggal 29-31 Oktober 2010 di Hotel Panorama Jember. Masyarakat diberi pemahaman tentang perubahan iklim, peran kehutanan dan praktker pengukuran lima sumber karbon.

Pelatihan perlindungan hutan dilaksanakan oleh Balai TNMB pada tanggal 10-11 November 2010 di hotel Sulawesi Jember. Kegiatan ini ditujukan untuk mengurangi illegal logging dan penyerobotan lahan serta ancaman dan gangguan lain. Kegiatan ini melibatkan Dinas Perkebunan dan kehutanan kabupaten Jember, dan dihadiri oleh 30 orang peserta. Selama dua hari, para peserta dilatih bagaimana melindungi TNMB dari ancaman dan gangguan dengan cara memberikan pengetahuan dan keterampilan seperti teknik penyelidikan, teknik penyuluhan kehutanan, perlindungan satwa liar, teknik pengelolaan dan kebijakan TNMB, serta materi lainnya.

Seminar peningkatan kesadaran masyarakat dilaksanakan pada bulan Oktober 2010 bekerjasama dengan Dinas Kehutanan Kabupaten Jember. Kegiatan seminar yang dihadiri oleh 85 peserta ini ditujukan untuk meningkatkan kesadaran masyarakat dan para pihak terhadap pentingnya keberadaan TNMB.

Untuk mengembangkan alternatif pendapatan, telah dilakukan serangkaian kegiatan untuk menangkap aspirasi masyarakat tentang kegiatan apa yang dibutuhkan masyarakat. Hasil dari peninjakan kebutuhan adalah gambaran tentang pilihan-pilihan kegiatan yang bisa meningkatkan pendapatan dan mengurangi emisi atau menambah stok karbon. Pilihan kegiatan tersebut mencakup:

Pengembangan produk agroforestri

Pengembangan produk agroforestri meliputi kegiatan-kegiatan penanganan pasca panen, serta pemasaran. Dalam kegiatan ini, dilakukan pengadaan vacuum frying untuk membuat kripik nangka, alat-alat untuk memproses jamu menjadi serbuk instan dan alat pres untuk mengema skripik. Pengadaan alat terwujud, atas kerjasama antara dengan Disperindag dan Dinas Kesehatan.

Establishment of plantation with economic value

From the results of mapping and inventory of land rehabilitation, as well as discussions with the farmers of rehabilitation zone, there were found two plant species that have high economic potential and could be planted as cash crops. Both of these plants are iles-iles and legume cover crops. Iles-iles (*Amorphophallus muelleri* Blume) is an herb that shade tolerance, therefore it can be planted under trees and in the bottom layer of agroforestry system. Currently, iles-iles has a pretty good market. Perhutani has been exporting iles-iles to Japan. The second type of plant is leguminosae nuts or commonly referred by farmers as Cover Crops "CC" or Land Cover Crops "LCC". This plant has to prevent the growth of grass, as well as to maintain soil moisture and to improve soil fertility.

Mushroom Cultivation

MBNP and District Office of Agriculture provide technical guidance and support in the form of initial capital to develop mushroom cultivation. Mushroom cultivation provides an alternative income to communities around the national park and therefore it has positive impact to reduce threat to forest, to increase forest sustainability as well as to support the implementation of DA REDD+ activities.

Catfish Farming

Organic catfish farming is a community activity that can provide additional income and provide nutritious food. There are currently three points at Kebunrejo Village used for organic catfish farming, one point consisting of two pools, sized at 4m x 6m, each filled with as many as 5,000 catfish. One of the potential of fish farming techniques to be developed is the cultivation of fish in the plastic pool. Cultivation of fish in the plastic pond has several advantages, namely: it can be applied in a limited area, can be applied in such a narrow area in the yard, can be applied in the soil or sandy soil that absorb water, can be applied in areas with lack of water, practical in preparation, shorter production time, and the fish has no mud smell.



Figure: Farmer group receives a vacuum frying to make jackfruit chips, witnessed by officials from District Office of Industry and Trade, Jember

[Gambar: Kelompok tani menerima vacuum frying untuk membuat kripik nangka, disaksikan oleh petugas dari Disperindag, Jember]

Pengembangan tumbuhan bernilai ekonomi

Dari hasil pemetaan dan inventarisasi lahan rehabilitasi, serta diskusi dengan petani pengelola lahan rehabilitasi, diperoleh dua jenis tanaman yang memiliki potensi ekonomi yang tinggi dan dapat menjadi pengganti dari tanaman semusim atau palawija. Kedua jenis tanaman tersebut adalah iles-iles dan kacang-kacangan. Iles-iles (*Amorphophallus muelleri* Blume) merupakan herba yang tahan naungan, sehingga dapat ditanam di bawah pohon dan menjadi lapisan bawah dari sistem agroforestri. Saat ini, iles-iles mempunyai pasar yang cukup baik. Perhutani telah mengekspor iles-iles ke Jepang. Jenis tanaman kedua adalah kacang-kacangan atau yang biasa disebut oleh petani sebagai "CC" atau "LCC". Tanaman ini untuk mencegah tumbuhnya alang-alang, serta menjaga kelembaban tanah dan meningkatkan kesuburan tanah.

Budidaya Jamur

Pihak TNMB dan Dinas Pertanian memberikan bantuan berupa bimbingan teknis serta modal awal untuk mengembangkan jamur. Budidaya jamur memberikan alternative pendapatan masyarakat sekitar TNMB sehingga berdampak positif terhadap berkurangnya ancaman terhadap kelestarian hutan dan mendukung kegiatan REDD+.

Budidaya Ikan Lele

Usaha budidaya lele organik merupakan kegiatan masyarakat yang dapat memberikan pendapatan tambahan dan menyediakan bahan pangan yang bergizi. Saat ini ada tiga titik di Desa Kebunrejo yang digunakan untuk budidaya lele organik, satu titik terdiri dari dua kolam seukuran 4m x 6m yang masing-masing diisi bibit lele sebanyak 5.000 ekor. Salah satu teknik budidaya ikan yang potensial untuk dapat dikembangkan adalah budidaya ikan di kolam terpal. Budidaya ikan di kolam terpal memiliki beberapa keunggulan, yaitu: dapat diterapkan di lahan terbatas, bias diterapkan di lahan sempit seperti di pekarangan, dapat diterapkan ditanah yang menyerap air atau tanah berpasir, dapat diterapkan di daerah sulit air, pembuatannya praktis, waktu produksi yang lebih singkat, ikan-ikan yang dibudidayakan di kolam terpal tidak berbau lumpur.



Figure: Construction of mushroom cultivation in Curahnongko Village

[Gambar: Bangunan budidaya jamur di desa Curahnongko]

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