MANGROVE FOREST MANAGEMENT STRATEGIES THROUGH THE EMPOWERMENT of *APONG* FISHERMEN IN CILACAP-INDONESIA

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ABSTRAK

Hutan mangrove di setiap bagian wilayah di indonesia terus terjadi penyusutan. Hal ini terjadi juga di Cilacap. Penyusutan hutan mangrove paling cepat di Cilacap terjadi karena penebangan liar vegetasi mangrove sebagai kayu bakar memasak nira kelapa dan sebagai bahan baku pembuat arang. Kondisi ini berdampak besar terhadap masyarakat nelayan apong. Nelayan apong adalah penangkap ikan di sekitar mangrove menggunakan jaring apong yang ditempatkan di sela-sela hutan mangrove. Oleh karena itu memerlukan strategi konservasi yang dilakukan langsung masyarakat yang berkepentingan. Penelitian strategi manajemen hutan mangrove di Cilacap ini dilakukan menggunakan metode research and Development melalui kegiatan eksperimen pemberdayaan nelayan apong. Lokasi penelitian ditempatkan di 4 kepala lingkungan dari kelurahan Jojok Kutawaru Cilacap. Hasil penelitian menunjukkan strategi managemen yang cocok dilaksanakan untuk konservasi dan pemanfaatan hutan mangrove berbasis pemberdayaan masyarakat nelayan apong adalah strategi silvofishery among-pamong. Strategi ini merupakan strategi manajemen yang melibatkan pamong praja melalui kegiatan pembinaan dan pendampingan secara langsung dan kontinue dalam mengembangkan silvofishery. Sistem silvofishery dilakukan menggunakan sistem unit, dimana masing-masing kelompok nelayan apong mengerjakan kegiatan pada bagian-bagian yang sudah ditentukan bersama dan dengan sistem ekonomi bagi hasil terpusat di koperasi. Dari hasil penerapan strategi ini dapat disimpulkan masing-masing pendapatan nelayan apong meningkat dengan pendapatan yang seragam antara satu dengan yang lainnya, sehingga tidak ada yang merasa dirugikan dan direndahkan dengan konservasi hutan mangrove sistem terpusat atau marginalis.

***Kata kunci**: strategi managemen, nelayan apong, sistem terpusat, marginalis, among-pamong*

ABSTRACT

Mangrove forests in every part of the region of Indonesia continued shrinkage. It also occurs in Cilacap. Most rapid shrinkage of mangrove forest in Cilacap occurred because of illegal logging of mangrove vegetation for firewood of cooking the sap of coconut and as a raw material of charcoal. These conditions have a major impact on fishing communities of Apong. Apong Fishermen is fishermen at around mangrove forest that is catch of fish by a placed of his nets in between the mangrove forest. Location of the study were placed in 4 head of the environment Jojok Kutawaru-Cilacap. The results showed that suitable management strategies implemented for the conservation and utilization of mangrove forest based on empowerment of Apong fisherman community is strategy-Silvofishery Among Pamong. This strategy is a strategy that involves of village employees

through coaching and mentoring about of conservation and silvofishery activities in directly and continuously. Silvofishery system performed using the unit system, in which each group of fisherman of Apong doing activities on the parts that have been determined together with centralized economic system in the cooperative. From the results of the implementation of this strategy can be summed up: the income of each fisherman of apong has increased uniformly to each other, so that no one fisherman from Apong has feel aggrieved, and conservation activities can be continuosly.

Key words**: Management strategy, **Apong** fisherman, centralized system vegetation, marginalis, **Among-Pamong

INTRODUCTION

Donan river in *Cilacap* has become a major road transport of oil and raw materials by *Pertamina* and *Holcim* company. This has caused many traditional fishermen who live around the river turned into a *Apong* fishermen. Apong fishermen activities conducted while a water have high tide. This is done because the water level of the river extends, so *Apong* planting can be carried nets on either side of the canal transportation. Thus activities of *apong* fishermen will not distrub to transportation. This activities have limited time, the meaning that fishing activities can not be done every day. Therefore the income of Apong fishermen is very low. Each time of Apong fishermen sowed his net, they will get many small fish evenly 26,74 kg and the selling price is Rp. 167.500,-. The result of their catch is namely a fish of *Rucah*. Consequently the income of apong fishermen was very low and far below with the average minimum wage in this district that is Rp.600.000,-. So that this village has become backward villages than others villages in district Cilacap (Tumisem, Purbomartono, & Wuliandari, 2010).

The dominant substrate in Cilacap mangrove area is mud. This condition is an opportunity to develop silviculture between: the cultivation of soft crabs, eel, sea bass, tilapia, milkfish, and others. The results of previous research about the cultivation of soft crabs can be improve the income of apong fishermen. Silviculture will be favorable for apong fishermen if one of comodity in cultivation have not successful. A good silviculture will always aligned with the needs of the commodity in the community. The selection of commodities should be done by considering: (1) according to the habitat so it is easy to adaptation, (2) have a good economic value for the local market, nationally and internationally so as to provide a high added value for fishermen, (3) strategic commodity for the fulfillment of the public this is fish protein, (4) has the agile movement or protector so not easy prey to predators that are around the mangrove, and (5) fast growing and relatively resistant to unfavorable conditions (Rizal, 2010).

RESEARCH METHODS

Research activities was carried out in the village *Jojok Kutwaru-Cilacap*. This village is located in the mangrove forest area. Majority of the peoples in this village as apong fishermen. The research have been conducted from February to November 2014.

As a research subject is a group of apong fishermen who is living in the village Jojok Kutawaru Cilacap. Object of this study emphasize to the development of strategies and models of small and medium enterprises (UKM) for apong fishermen through development business units of fishpond who was based on conservation and empowerment.

Population in this research consisted of 11 groups apong fishermen with numbers of members is 39 peoples and spread across in three places of environments. Each of these place led by the head of the environment and usually referred to as *Kaling*. This research is a population research.

Instrument was used in this research is the observation and discussions sheet, and questionnaires. Some aspects are observed: feasibility, ease, effectiveness, and sustainability. Discussion sheets reveal some aspects include: the problems and obstacles faced by each business unit. And questionnaire revealed a common desire, motivation, knowledge and skills each members of business units. The research method used experimental design. Experiments conducted is managed on the silviculture system by marginal and center conservation. Data analysis was done with the description.

RESULTS AND DISCCUSSION

The results of research was showed utilization of integrated strategy to keep doing the mangrove forest conservation system can be done in two ways, namely utilization of mangrove forest strategies for education and utilization of mangrove forests by empowering fishermen. The empowerment system is using system of officials the village so known as *among pamong*. In the **Figure 1** is the utilization of mangrove forest strategies for education through experimental and the project learning approach, who was carried out at outdoor education. This learning was carried out through extracurricular, namely PRAMUKA. The ending of learning was oriented for seeding mangrove propagules and the planting of mangrove seedlings at mangrove area who used the *Mentoring Partnership Model* (Tumisem & Suwarno, 2012).

And in the **figure 2** is the utilization of mangrove forests by empowering fishermen using system of officials the village so known as *among pamong.* This system can be increase revenue a apong fishermen. Silviculture proses in this system as follows: each business unit in each *kaling*, will sow the seeds of different fish. It aims for producing a variety of fish products according to customer needs. In each *kaling* sowing three fish. In *kaling* 1 was sowed species of fish *bandeng, nila* and crabs, in kaling 2 are mujair, terongan, and crabs, and in kaling 3 are *bawal, patin*, and crabs. Crabs cultivation in kaling 2 and 3 is only enlargement, whereas in kaling 1 is cultivation for soft crabs, because in the *kaling* 1 have water quality that is suitable for the cultivation of the soft crabs than *kaling* 2 and 3. To increas the process production of soft crabs are of good quality and super-sized, then results from the enlargement of crab in kaling 2 and 3 must be moved to kaling1. This silviculture activities was produce 7 kinds of products are: soft crabs, milkfish, *terongan, tilapia, mujair*, *bawal*, and *patin* (Tumisem & Suwarno, 2013).

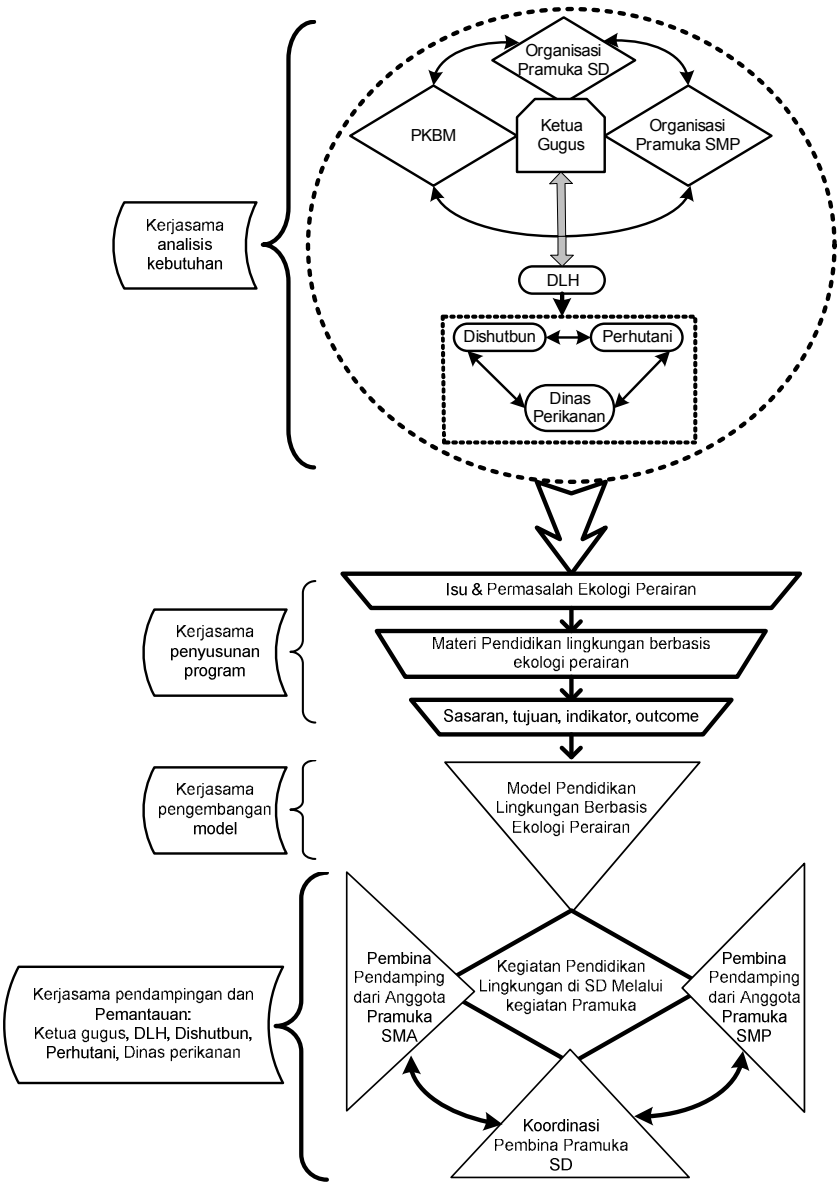

Figure 1. The Mentoring Partnership Model Using a System *Among*.

The results of each production from each kaling was centered at village cooperatives (KUD) with all the coordinators is chairman of each kaling and responsible person of the activity is chairman of village communty institutions (LKMD). KUD will market to all consumers both locally and regionally. Proceeds from sales will be a joint venture capital and net income from marketing will be divided equally in each *kaling* (Tumisem & Suwarno, 2014).

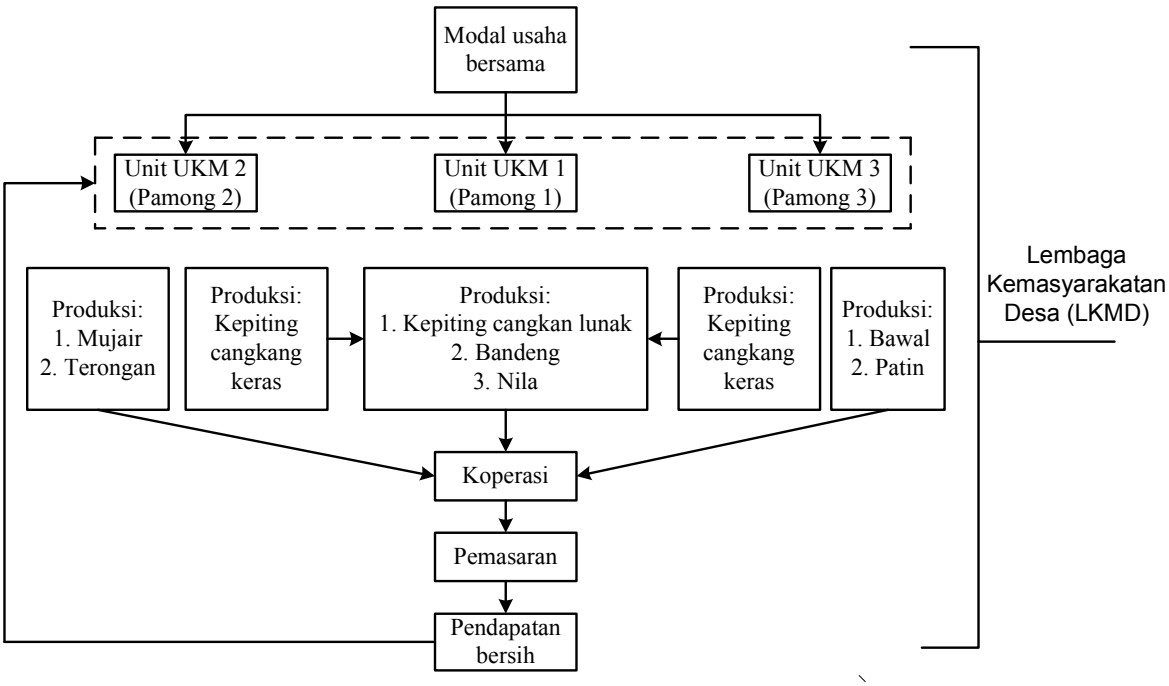

Figure 2. The utilization of mangrove forests by empowering fishermen using a system of officials the village so known as *among pamong*

At the Figure 3 show the management of mangrove conservation with the marginalis system and centered system (Tumisem & Suwarno, 2014).

Figure 3a. The Centered System Conservation

Figure 3b. The Marginalis System Conservation

CONCLUSION

Silviculture activities through empowerment of fishermen Apong can be increase the income each month until it reaches Rp. 5,276,667, -. This system silviculture is also able to maintain the existence of the mangrove forest in Cilacap.

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