### Summary of the Evaluation

1. Outline of the Project	
Country: Union of Myanmar	Project title: Project for Eradication of Opium Poppy
	Cultivation and Poverty Reduction in Kokang Special
	Region No.1
Sector: Agriculture Development	Cooperation scheme: Technical Cooperation
Division in charge : Rural Development	Total cost: 800 Million JPY
Department	
Period of 2005.4.1 ~ 2010.3.31	Partner Country's Implementing Organization:
Cooperati	Natala, KSR1, MAS, MOE, MOH
on	Supporting Organization in Japan:
	Related Cooperation

#### 1. Background of the Project

JICA had dispatched experts since 1997 to support and promote buckwheat cultivation as substitute crop cultivation mainly in Kyaukme, Northern Shan State. In 2003, JICA launched a technical cooperation project with a comprehensive approach of agricultural development, renovation/construction basic infrastructure, enhancement of education and health for 5 years scheduled from April 2005 to March 2010 during the dissemination of buckwheat cultivation after the eradication of poppy opium.

In Mid-term evaluation executed in September 2007, the Project and its stakeholders confirmed that it would be implemented in line with "pilot village tract development support" for the latter half of the project implementation. The Project has practiced tea cultivation as a substitute crop, lowland and upland rice maize cultivation, school health activities through rural health centers, rural health activities, literacy education, water supply facilities, animal dispersal through revolving system (pig, goat, buffalo and cattle), and promotion of handy crafts mainly for 6 pilot village tracts.

The incident occurred in August 2009 in City of Laokai, Kokang Special Region No.1 (KSR1). Due to the incident, experts moved to Lashio in the end of September and they are currently executing project activities for the scopes described above through remote operation with CPs that are continuously engaged with the project activities in KSR1.

The terminal evaluation study was carried out mainly through interviewing survey with 6 experts and 7 CPs and questionnaire survey. The objectives of the terminal evaluation mission are to verify outcomes produced by competed activities and degree of project achievement compared with the initial plan from the launch of the Project to the present (including remote operation in Lashio), evaluate the Project with 5 evaluation criteria based on the verification, and obtain lessons learned and recommendations based on the evaluation results.

### 2. Project Overview

### (1) Overall Goal

(Overall goal 1) Living conditions of the beneficiaries are improved.

(Overall goal 2) Successful experiences of the poverty reduction and rural development in Kokang Special Region

No.1 is demonstrated as a rural development model of post opium poppy cultivation areas.

## (2) Project Purpose

(Project purpose 1) Critical situation of people in poverty right after the eradication of opium poppy cultivation is mitigated.

(Project purpose 2) Successful experiences of poverty reduction activities implemented with collaboration of Myanmar government and Kokang Special Region No.1 and villagers' self-reliant participation are demonstrated mainly in the Pilot Areas.

## (3) Outputs

(Output 1) Urgent critical situation is mitigated in Kokang Special Region No. 1.

(Output 2) Technicques and approaches regarding the whole process from cultivation to marketing of substitute crops are improved mainly in the Pilot Areas.

(Output 3) Improved farming techniques are disseminated and used by farmers mainly in the Pilot Areas.

(Output 4) The villagers' livelihood is improved (e.g. through group activities) mainly in the Pilot Areas.

(Output 5) Basic health situation and education environment are improved mainly in the Pilot Areas.

## (4) Inputs

### Japanese side:

Long-term Experts 10 Experts (302.93M/M) Equipment 25,037,000 Yen

Short-term Experts 1 Experts (1.19M/M) Local cost 679,996,000 Yen

Trainees received 5 Trainees

Myanmar side:

Counterparts (CPs) 19 CPs

Provision of office space Local Cost 20,000,000 Kyat

## 2. Evaluation Team

Members of		
Evaluation	Satoshi HAGIWARA	Team Leader
Team	Hiroshi HIDAKA	Study Planning
	Akira OGASAWARA	Evaluation and Analysis Consultant, VSOC Co., Ltd.
	Satoshi HAGIWARA	Team Leader
	Hiroshi HIDAKA	Study Planning
Period of	2010 /2 /9 ~ 2010/2 /24	Type of Evaluation: Terminal Evaluation
Evaluation		

## 3. Results of Evaluation

# 3-1. Measurement of Results

## (1) Project Purpose

Project purpose 1 is achieved according to the following outcomes.

- -Food self sufficiency rate has shown about 6 months per year on average according to monitoring by CP.
- -After the distribution of malaria bed-nets. malaria-related mortality and infection rate is kept lower level

in all village tracts, compared to those in 2004. These tendencies can be identified as outcomes of emergency support by the Project and the results of emergency support operation executed by other development partners (WFP, AMDA, ADRA, CARE, etc.).

Project purpose 2 is almost achieved.

- -"Good examples of successful experiences" by the project activities are explained as following activities; 1) improved farming system for cultivation of substitute and cash crops such as maize, rice, tea, buckwheat, and walnut, 2) training and practicing bokashi and compost making, 3) practicing animal dispersal system, 4) operating literacy class for out of school children, and 5) practicing school and community health.
- -Expected successful experiences in FY 2009 have not been sufficiently accumulated.

#### (2) Output 1

Output 1 is achieved according to the following outcomes.

- -Fertilizers and seeds distributed as emergency assistance contributed to increase in agriculture production of the beneficiaries due to the improvement of accessibility to agricultural production materials.
- -The distribution of malaria bed-nets contributed to preventing from massive prevalence of malaria after the emergency support. There has been no massive infection/outbreak reported since distribution of malaria bed-nets.
- -Road renovation between Tarshwetan and Konkyan made human movement and transportation easier even during rainy season. The renovation has positively facilitated the smooth activities/operations of not only the Project (production of other outputs and achievement of the project purposes), but also development partners (WFP and NGOs).

## (3) Output 2

Output 2 is partly unachieved according to the following outcomes.

- -Recommended variety of maize seed (QPM) was distributed to farmers in Taushwe, Manlow, Chuntai and Shaukai village tracts and its distribution amount counted 678 kg from FY 2008 to FY 2009.
- -Lowland rice "YJ-202" and upland rice "CNBR" and "WAB" have been identified as promising varieties through experiment and delivered to farmers in Manlow, Minchen and Chuntai village tracts. Their distribution amount counted 1,020 kg of lowland rice seeds and 526 kg of upland rice seeds in 2008 and 2009. Lowland rice variety "YJ-202" has been spread among farmers in Manlow village tract through multiplication and distribution by farmers.
- -A total of 2,100,000 tea seedlings were provided to farmers in mainly Minchuen and Chuntai village tracts where a small number of tea seedlings were cultivated. Also, Sloping Agricultural Land Technology (SALT) has been introduced and promoted. It is obvious that yield of cash crops (tea) may increase considerably due to the introduction of dense planting. However, there is no sale amount data available at present since tea trees are still under-growing stage.
- -In Marlipyn village tract, buckwheat cultivation is continuously practiced mainly by, buckwheat cultivation committee. Sales amount of buckwheat produced in Kokang to Shwe Yi Company counted 7.5 ton in 2008.
- -Having the support from the Project and introduction of recommended varieties, yield of substitute crops is expected to increase. Some model farmers have already shown 30% increase in lowland rice production.
- -In FY 2009, buckwheat cultivation, technical advices for tea farmers and experimental demonstration in Tarshwetan farm were remained unimplemented.

## (4) Output 3

Output 3 is partly unachieved according to the following outcomes.

- -More than 1,600 farmers from all of 18 village tracts received agriculture training from FY 2005 to FY 2009.
- -More than 100 farmers out of 1,000 farmers who received bokasi training are continuously practicing bokshi making from FY 2006 to FY 2009. Also, 54 farmers out of 133 farmers who have received compost training from FY 2007 to FY 2009 are making compost.
- -MAS project staffs can organize by themselves agricultural training on Bokashi and some useful techniques. Also, their communication skills with farmers have been improved.
- -In FY 2009, bokashi training, and demonstration in Nali farm and model farmers were remained unimplemented.

## (5) Output 4

Output 4 is partly unachieved according to the following outcomes.

- -More than 3 activity groups in each pilot area were organized and 29 activity groups in total have been engaged with income generating activities such as animal dispersal through revolving system.
- -Water supply facilities in 9 villages for 486 households constructed or renovated by the Project have contributed to the improved life standard of the people.
- -CP's communication skills with villagers and vaccination skills for pig have been improved.
- -In FY 2009, monitoring for animal dispersal through revolving system and 3 water supply facilities in Taukshwe village tract were remained unimplemented.

## (6) Output 5

Output 5 is partly unachieved according to the following outcomes.

- -In total, about 4,200 school children have received health education by school teacher at 50 out of 60 schools in pilot areas. Children in 9 schools in pilot areas have secured access to sanitary school toilets constructed by the Project.
- -A total of 73 literacy classes have been held and operated in cooperation with literacy education committees and 2,364 villagers have studied in 5 pilot village tracts.
- -CP from MOH can promote and mange EPI program through experiencing project activities. CP from MOE can promote and coordinate literacy education program.
- -Awareness to cleanliness and sanitation has been raised among participants. Through the instruction by the workshop participants to students, change of behavior, reduction of parasite and malaria infection among students has been observed.
- -In FY 2009, teacher training on literacy class and health education, 2 literacy classes in Lontan and Minchuen village tracts, 1 school construction in Chuntai village tract, 1 school renovation in Shaukai village tract, 13 school latrines in Lontan, Mincuhen and Chuntai village tracts were remained unimplemented and implementation of EPI program in Lontan and Taukshwe village tracts is delayed.

### 3-2. Summary of Evaluation Results

# (1) Relevance

The relevance of the Project is high according to the following outcomes.

-The Government of Myanmar promulgated "15 year-plan of opium poppy eradication" in 1999 and declared to achieve the eradication of opium poppy cultivation by 2014. Therefore, the Project is

consistent with the policy of the Government of Myanmar.

- -The Project is also in line with Japan's Official Development Assistance (ODA) policy and JICA's priority area of assistance.
- -The Project meets with the urgent needs of people in critical situation.

#### (2) Effectiveness

As described in "3-1. Measurement of Results, (1) Project Purpose" Project purpose 1 is achieved and Project purpose 2 is almost achieved. Successful experiences have been accumulated in CPs although some of project activities were not executed. the effectiveness of the Project is relatively high according to the following outcomes.

- -Remarkable number of malaria patients has not been reported after distribution of malaria bed-nets by the Project. Distribution of fertilizers and crop seeds has improved productivity of farmland and contributed to food security.
- -The road renovation between Tarshwetan and Konkyan has contributed to better accessibility to markets, public facilities and transportation of commodities even during the rainy season.
- -Accumulation of successful "experiences" through self-reliant participation in the relevant stakeholders (CPs, beneficiaries, etc.) has been observed through the project implementation.
- -Effectiveness is influenced by the unsatisfactory achievement in FY 2009 due to the delay in some project activities.

## (3) Efficiency

The efficiency of the Project is adequate according to the following outcomes.

- -Road renovation work was executed jointly by local construction companies and beneficiaries. Local technology, "manual stone pitching" was adopted with local materials utilized.
- -Project activities start to contribute to the production of outputs; in particular, local committees such as literacy committee, animal dispersal committee and buckwheat cultivation committee established at the community level highly contribute to the achievement of outcomes. Also, each output starts to produce outcomes gradually.
- -Capacity of CPs has been strengthened in each activity. CPs in the agriculture, livelihood improvement, health and education sections have been assigned with appropriate timing, although assignment of CP from MOH was delayed.
- -Efficiency of the Project has been negatively influenced by delay of activities in FY 2009.

#### (4) Impact

The impact of the Project is medium. The following concrete impacts in terms of technology and organization are observed:

- -The renovated road shortens traveling time between Laukai and Konkyan to about 2.5 hours from about 6 hours especially during rainy season. KSR1 constructed a feeder road of more than 5 km to Manlow under their initiative. Maintenance has been properly carried out by KSR1 in cooperation with Natala.
- -There is one village tract that has begun to demonstrate their ownership: Manlow village tract is in the stage of multiplying and distributing rice seeds (YJ-202) on their own after receiving primary seeds from the Project.
- -A few of activity groups for income generating activities demonstrate sustainable efforts: 3 groups have started to manage animal dispersal without financial assistance from the Project.
- -No negative impact has been observed.

## (5) Sustainability

The sustainability of the Project is medium. The sustainability in terms of organizational, financial and technical aspects are shown in the following:

- <Organizational Sustainability>
- -Organizations including various kinds of beneficiary committees established by the Project are not mature yet as independent organizations. Therefore, committees need to be supported by the Myanmar side continuously.
- -Rural health sub-centers (RHSC) supported by the Project in Lontan and Taukshwe village tracts have been functionalized with initiative of MOH by assigning midwifes and provision of medicines, etc.
- <Financial Sustainability>
- -The Myanmar side has share local cost of 20,000,000 kyat only in FY 2005. The situation on budget allocation from the Myanmar side for the future activities still remains to be uncertain.
- <Technical Sustainability>
- -CPs have upgraded various skills and techniques in the fields of farming system and extension, livelihood improvement, health and education.
- -Some farmers have started to practice methods acquired in the agricultural trainings (Bokashi, compost and their utilization) by themselves. The number of practicing farmers is still limited.
- -Most of the beneficiary committees in every sector have started to take their positive actions in their activities.

### 3-3-1. Factors that promoted realization of effects

- (1) Factors Concerning to Planning
- -As a result of adopting to selecting 6 pilot village tracts and pilot village tract development support as a project approach, the Project has successfully benefited a wide range of beneficiaries.
- (2) Factors Concerning to the Implementation Process
- -Beneficiary committees have been indispensable to implementing community-level project activities. Most of the beneficiary committees such as literacy committee, animal dispersal committee established by the Project started to take their positive actions in their activities, even though they are immature in terms of management and human resource.

# 3-3-2. Factors that impeded realization of effects

- (1) Factors Concerning to Planning
- -Nil
- (2) Factors Concerning to the Implementation Process
- -Due to the incident occurred in August 2008, some of the project activities were delayed, which has been an inhibiting factor for the project implementation.
- -Due to a lack of means of communication, unsecured access to main roads especially during the rainy season, coverage areas by the Project has been limited to some extent.
- -Low-literacy and a lack of awareness of farmers sometimes resulted to not executing monitoring activities for the Project appropriately. The hardships/difficulties of obtaining data for sufficiently measuring project outcomes have inhibited appropriate evaluation by the Team, which impeded implementing an appropriate evaluation.

#### 3-4. Conclusion

Through the active implementation by Japanese experts, CPs, project staffs and the concerned people by

now, the Project produced its outcomes at a certain level. However, the outcomes do not yet reach the full achievement level since outcomes of some activities are not produced yet because of unimplemented activities.

#### 3-5. Recommendations

- (1) Based on the results of the survey, the Team recommends that extension of the Project period for at least one and half years should be considered in order to recover their delay. Activities which should be implemented during the extension period as follows:
- Output 2: buckwheat cultivation, technical advices for tea farmers and experimental demonstration in Tarshwetan farm
- Output 3: bokashi training, and demonstration in Nali farm and model farmers
- Output 4: monitoring for animal dispersal through revolving system and 3 water supply facilities in Taukshwe village tract
- Output 5: teacher training on literacy class and health education, 2 literacy classes in Lontan and Minchuen village tracts, 1 school construction in Chuntai village tract, 1 school renovation in Shaukai village tract, 13 school latrines in Lontan, Mincuhen and Chuntai village tracts, EPI program in Lontan and Taukshwe village tracts
- (2) In case of extension, assignment of the same CPs, and provision of office compound with multi-purpose functions in Laukai are indispensable.
- (3) Continuous monitoring and support by the Myanmar side to the constructed/renovated facilities by the Project and the beneficiary committees organized by the Project is strongly advised for their sustainable use and their sustainable activities.

## 3-6. Lessons Learned

- -In setting up numerical verification indicators described in PDM, accurate data collection through proper means is indispensable. Therefore, when it is fond out that accurate data is not available and/or accessible, numerical verification indicators should be reconsidered or preconditions on data quality and quantity should be defined.
- -In collection of data in the remote areas, special attention should be paid in that accurate data collection is practically difficult. Therefore, more practical data collection methods should be discussed in the initial stage of project implementation.

# 3-7. Follow-up Situation

Recommendations for assignment of the same CPs, and provision of office compound in Laukai were provided. Both of Myanmar and Japanese's sides are going to start to follow necessary procedures for the extension of the project period.

(end)