

**IMPACT MONITORING REPORT**

**SURVEY ON ADDITIONAL INCOME  
GENERATED WITH THE VALUE CHAINS IN 2009**



**Implemented by: Truong Quoc Dat**

**Dong Hoi, 05/01/2010**

**ADDITIONAL INCOME  
GENERATED WITH THE VALUE CHAINS IN 2009**

**1. SURVEY SUMMARY**

Regarding the project impact indicator No.2 "In the intervention areas, the additional net income of households and small enterprises involved in the promotion of value chains increases by at least 10% annually", the impact monitoring report on additional income of households involved in the value chains in 2008 shows that (1) additional net income from apiculture increases by 20% (compared to 2007); (2) from pepper decreases nearly 3% (compared to 2007) and (3) from sericulture decreases mostly 22% (compared to 2007). The reason is due to serious natural calamity and inflation rate in 2008 that is over 20%, together with change of market price (please refer to the project impact monitoring report in 2008)

The Value Chain promotion in 2009 has many outstanding remarks as follows:

- The support of the Apiculture Value Chain was phased out (in 09/2008) as Apiculture Associations are effectively operational in 2 districts.
- Big change in production structure of the Sericulture Value Chain to increase competitiveness following the tendency that stabilizing (decrease but limit) mulberry area but increasing productivity and cocoon quality.
- The project continues the support of changing production structure of the sericulture value chain by activities to increase competitiveness. In addition, activities in production and marketing of pepper value chain have been strengthened by the project.

Based on the Operational Plan until the project end in 03/2010, to evaluate the fulfillment of the indicator No. 2, the Project Management Board has agreed to carry out the impact monitoring survey of households involved in three value chains: Apiculture, Sericulture and pepper at the end of 12/2009.

**1.1. Survey objective**

The survey aims at (1) evaluating impacts of households participating in the promotion of value chains: Apiculture, Sericulture and Pepper in 2009 in comparison with the expected indicator that additional net income increases by 10% annually, (2) raising out recommendations for associations/ groups and local authorities to have orientations in the promotion of these value chains next years.

**1.2. Survey timeframe and scale**

- Scale: The survey was conducted from 21 to 29/12/2009 in communes with households involved in value chains of Apiculture, Sericulture and Pepper
- Participants: M&E staff, Value Chain Program officer, CEWs, associations and beneficiaries group.
- Information collection from households participating in Value Chain Promotion
- Recommendations collection from communal, village staff, associations and involving households

**1.3. Basic information for information collection**

**1.3.1. Questionnaire design**

- The survey questionnaires were based on the survey objectives (regarding the indicator No.2). The main target of the survey is households which were applied with questionnaires used in the last survey in 12/2007 and 12/2008 (easy for comparison and evaluation).
- Notably, similar with the survey conducted in 12/2007 and 12/2008, additional net income of households from Apiculture, Sericulture, Pepper and non-market products

## **Sustainable Management of Natural Resources in Central Vietnam (SMNR-CV)**



such as labors cost, consultative service was transformed into money terms at current market prices.

- Additional net income (similar to 2007 and 2008):  $(C) = (A) - (B)$ , of which:
- (C) : Additional net income from one sub-sector /VC
- (A): Total output
- (B): Total cost

### **1.3.2. Number of survey samples**

The sample number was identified in an identical way with that in 2007 and 2008 for households involved in the value chains of Apiculture, Sericulture and Pepper. The sample number was selected by traditional method (covering 2-5% of the total number of households involved in the Value Chain Promotion) equivalent with the number of interviewed households (see Annex).

### **1.4. Information collection and data analysis**

- Field implementation, interviews of households, communal leaders/ village heads, associations on short-term impacts of the Value Chain Promotion in 2009 and orientations after the project end.
- Data entry and analysis was made in Exel in the project office
- Recommendations, observations.

### **1.5. Limitations of the survey**

- The survey was conducted only in households involved in the Value Chain Promotion in 2007 and 2008 with representative information provided by CPC leaders, village heads, staff of Associations, key staff of interest group of pepper households and observations of project staff. The information in this report is only representative but not general for impacts (although these impacts are short-term) of the project for households involved in the Value Chain in 2009.
- In 2009, Vietnam economy has suffer serious consequences of the inflation in 2008. Input costs for production are high and the survey time period is not updated with market change (change in months). Specifically, price of products of value chains decreases significantly. Therefore, input materials and outputs are relatively accurate only for the project impact monitoring.
- This report is based on information agreed among members of the survey group. It is internal with the aim at providing impact monitoring report for the PMB (to evaluate and compared to fulfilment of the indicator at the end of the project) and sharing information with associations and local authorities to better implement VC promotion in the future.

## **2. SURVEY RESULTS**

### **2.1. Sericulture Value Chain**

#### **2.1.1. Input (supported by the project in 2009)**

The outstanding remark of sericulture VC in 2009 is that the project continues the support of structure change of plants following the tendency of keeping the old mulberry cultivation area (decrease but limit) but increasing productivity and selling price in the local market (see Table 1 for main implemented activities).

**Table 1: Supports by the project for Sericulture VC**

	<b>Activities (input)</b>	<b>Results</b>
1	Training on techniques of bamboo frame making for farmers to produce good bamboo frames and prevent mulberry and silkworm diseases	Transfer techniques of Sericulture Variety Centre in Thai Binh for involving households.
2	Support bamboo frames for silkworm rearing households to improve cocoon quality	Support 19,333 bamboo frames, (achieving 50%) for farmers in 8 sericulture communes in Tuyen Hoa district
3	Support sterilized medicine for silk worm disease prevention	Provide 1215 kg clorua for sericulture households in 8 communes
4	Provide technical manual on mulberry cultivation and silkworm rearing for farmers	Compile and print 500 of Sericulture Association to distribute to farmers
5	Support new mulberry cultivation variety VH-13 (high productivity mulberry variety)	New plantation of 4 ha mulberry in 2 potential communes
6	Consolidate sericulture sub-associations	Done in 8 communes
7	Workshop on experience sharing and planning for sustainable development of the sericulture value chain	Participation of stakeholders: local authorities, Sericulture Association, key farmers and local and regional sericulture enterprises

**2.1.2. Additional net income of households involved in Sericulture VC**

- As in 2008, it is planned that the survey on additional net income in 2009 will be conducted in households which participated in the last survey in 2008. However, in fact, only 70% of these households involved in this survey due to the fact that some of them are not present in the locality at the survey time. Therefore, the working group selected other households for replacement (data in this report is not the same as that in the report in 2008). Please refer to survey data of sericulture in Annex 1 and 2).

**Table 2: Average additional income of households involved in Sericulture VC in 2009**

	In 2007		In 2008		In 2009	
	Increase compared to 2006	Total sample	Total sample	Decrease compared to 2007	Total sample	Increase compared to 2008
	%	VND	VND	VND	VND	%
	(1)		(2)		(3)	
Average additional income from sericulture	2.81	1,659,323	1,181,505	- 22.03	1,206,787	<b>2.14</b>

**Table 3: Input and output of sericulture in 2009**

Comparison index	In 2008		In 2009		Increase/ decrease compared to 2008 (%)
	Quantity	Amount	Quantity	Amount	
Silkworm egg (VND/round number of rounds per year) *	45,000/round	315,000	45,000/round	270,000	-14.29
Silkworm cocoon yield (kg)	55	1,741,265	52	1,920,787	10.31
Cocoon price (kg)	32,000		37,000		15.63
Income from sericulture		1,741,265		1,920,787	10.31

*Note: (-) decrease*

- In 2009, income of sericulture households increases by **2.14 %** (compared to that in 2008- see Table 2), not achieving the project indicator (increase by 10% annually). The main reason is that sericulture households shift mulberry to other plants in 2009. Although cocoon price increases by 15.63% compared to 2008 (refer to Table 3), cocoon rounds decrease (7 raising rounds in 2008 and 6 in 2009) and cocoon productivity decreases compared to 2008.
- Positive impact of sericulture VC is the cocoon price increase. It is evident that the project support increases competitiveness of cocoons and bring good effects. This is the sustainable development of Sericulture VC after the project end.

## 2.2. Pepper Value Chain

### 2.2.1. Input (supported by the project in 2009)

In 2009, the project support activities in pepper production and marketing. Main activities are of as follows:

**Table 4: Supports by the project for Pepper VC**

	<b>Activities (input)</b>	<b>Results</b>
1	ToT training for Cews participating in pepper VC	Support 15 CEWs in pepper clusters in Le Thuy and Bo Trach
2	Technical training of pepper harvesting and peppercorn product marketing	Training for 127 pepper farmers in communes: Sen Thuy; Thai Thuy, Truong Thuy and Van Thuy in Le Thuy
3	Technical training on pepper tending and disease prevention	4 courses in 4 communes
4	Support the formation of credit fund pepper interested groups and training on operational management for members	2 credit fund in 2 communes
5	Study tour on pepper models in neighbouring provinces	Study tour for 24 good farmers and Cews in 4 communes to Tan Lan, Quang Tri

## Sustainable Management of Natural Resources in Central Vietnam (SMNR-CV)



### 2.2.2. Additional net income of households involved in Pepper VC Table 4: Average additional net income of pepper households

No.	Item	In 2007	In 2008	In 2009	Net income in 2008 compared to 2007		Net income in 2009 compared to 2008	
		Total sample	Total sample	Total sample	(+/-) 2007	% (+/-) 2007	(+/-) 2008	% (+/-) 2008
1	Average cost (VND)	3,069,276	3,610,483	3,658,358	541,207	17.63	47,875	1.33
2	Dry pepper yield (kg)	198	221	259	23	11.62	38	17.19
3	Average price (VND/kg)	53,800	48,850	40,217	-4950	-9.20	-8633	-17.67
4	Total average amount	11,515,700	10,469,552	10,336,400	-1,046,148	-9.08	-133,152	-1.27
5	Net income	6,917,627	6,859,069	7,104,725	-58,558	<b>-0.85</b>	245,656	<b>3.58</b>

Note: (+) increase; (-) decrease

- Additional net income of pepper households in 2009 increases by 3.58 % compared to 2008, but not achieve the project indicator (10%/ year). The main reason is that peppercorn price at the selling time decreases by 17.67% compared to 2008 (refer to data in Annex 4).
- One positive impact is that peppercorn yield in 2009 increases by 17.19% compared to 2008 due to the fact that households well apply pepper tending techniques after attending technical trainings supported by the project.

### 2.3. Apiculture VC

- In fact, the support for households involved in the Apiculture VC was phased out in 09/2008 as Apiculture Associations are well operational independently. Additional net income of households increases by 20% in 2008 (over the project indicator 10%/ year). In 2009, Apiculture Associations develop themselves their operational plans and manage their activities following the orientation of increasing market share of domestic product (retail in local markets and traders).
- In the total sample, additional net income of apiculture households increases by 31.41% in 2009 compared to 2008 (see Table 5).

**Table 5: Average additional income of households involved in Apiculture Value Chain**

No.	District	In 2007	In 2008	In 2009	Net income in 2008 compared to in 2007 % (+/-)	Net income in 2009 compared to in 2008 % (+/-)
1	Minh Hoa	5,449,498	8,958,133	11,046,667	64.38	23.31
2	Tuyen Hoa	3,156,911	6,776,600	9,630,983	114.66	42.12
	Total sample	4,282,363	7,867,367	10,338,825	83.72	<b>31.41</b>

- Average number of bee hives increases quite high: average number of bee hives in 2008 is 5.38 hives per household; and 20 in 2009; average productivity is 5.9 kg / hive (see Table 6).
- Average income of apiculture households in 2009 remarkably increases compared to 2008 (see Annex 3).

**Table 6: Characteristics of households involved in Apiculture VC**

	In 2008	In 2009
	Total sample	Total sample
Number of current households (number of bee hives/ household)	5.38	20
Average productivity (kg/ hive)		5.9
Average income from Apiculture (VND)	10,040,500	12,488,333

### 3. RECOMMENDATIONS

- Comment 1: Additional net income of households involved in Apiculture and Sericulture VCs in 2009 increases quite high, exceeding the project indicator (31.41 % for Apiculture and 14.28% for sericulture. Beside, additional net income from pepper in 2009 increases but is below the project indicator (increase 3.58% < 10%)
- Comment 2: The Value Chain methodology has shown the sustainability of project activities. Although the project phased out the support for the Apiculture VC, income of involving households still increases quite high. Especially, number of bee hives increases by 4 times compared to 2008 (see Table 6). According to information provided by two apiculture associations, households can at present supply enough breeding bees for the local markets.
- Comment 3: The Value Chain methodology has created opportunities for households to increase their annual additional net income and provide positive impacts on poverty reduction (1/4 project fulfilment indicator).

## Sustainable Management of Natural Resources in Central Vietnam (SMNR-CV)



### Annex 1: Area, yield and average income of surveyed households

Commune	Mulberry area in 2008 (ha)	Mulberry area in 2009 (ha)	Yield in 2008 (kg)	Total income in 2008 (VND)	Yield in 2009 (kg)	Total income in 2009 (VND)
Dong Hoa	0.08	0.07	56	1,811,686	53	1,991,143
Duc Hoa	0.10	0.10	52	1,605,410	57	2,094,200
Huong Hoa	0.06	0.06	23	740,000	25	934,250
Mai Hoa	0.10	0.09	40.5	1,277,700	40	1,465,200
Phong Hoa	0.09	0.08	76.5	2,450,000	70	2,575,200
Thach Hoa	0.10	0.06	49	1,517,200	50	1,831,300
Thanh Hoa	0.10	0.10	71	2,265,600	60	2,218,700
Thuan Hoa	0.08	0.08	65	2,083,400	56	2,080,100
<b>Average Grand</b>			<b>55</b>	<b>1,741,265</b>	<b>52</b>	<b>1,920,787</b>

### Annex 2: Average net income of surveyed households

No.	Commune	In 2008 (VND)	In 2009 (VND)	Income change percentage compared to 2008 (VND)	Income change percentage (%)
1	Dong Hoa	1,281,686	1,389,000	107,314	11.55
2	Duc Hoa	1,105,410	1,330,200	224,790	24.09
3	Huong Hoa	343,125	463,625	120,500	52.80
4	Mai Hoa	839,100	774,700	-64,400	2.21
5	Phong Hoa	1,680,000	1,698,200	18,200	4.91
6	Thach Hoa	991,200	1,106,300	115,100	19.67
7	Thanh Hoa	1,569,500	1,411,700	-157,800	2.80
8	Thuan Hoa	1,504,400	1,386,600	-117,800	3.07
	<b>Average Grand</b>	<b>1,181,505</b>	<b>1,206,787</b>	<b>25,281</b>	<b>14.28</b>

**Sustainable Management of Natural Resources in  
Central Vietnam (SMNR-CV)**



**Annex 3: Yield, selling price and total average income**

No.	Commune	Average yield in 2008	Average yield in 2009	Average selling price in 2008	Average selling price in 2009	Average income in 2008	Average income in 2009
1	Hong Hoa	58	62	96,667	103,333	5,700,000	6,383,333
2	Quy Hoa	13	23	100,000	105,000	1,325,000	2,475,000
3	Trung Hoa	85	127	105,000	103,333	11,703,333	15,683,333
4	Hoa Hop	33	40	97,500	105,000	3,275,000	4,200,000
5	Xuan Hoa	177	192	98,000	104,000	21,289,000	23,590,000
6	Dong Le town	97	106	84,375	117,500	10,315,000	14,125,000
7	Thuan Hoa	75	82	80,833	109,167	6,763,333	9,983,333
8	Le Hoa	111	113	81,429	120,000	10,127,143	13,628,571
9	Kim Hoa	118	56	86,667	120,000	10,716,667	8,700,000
	Average Grand	94	102	90,917	109,500	10,040,500	12,488,333