



T. Hóa *luong* value chain development project (LDP)

Phase II

Progress report for steering committee

(April to December 2008)



Document delivered at the 8th meeting

(second session)

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Synthesis:

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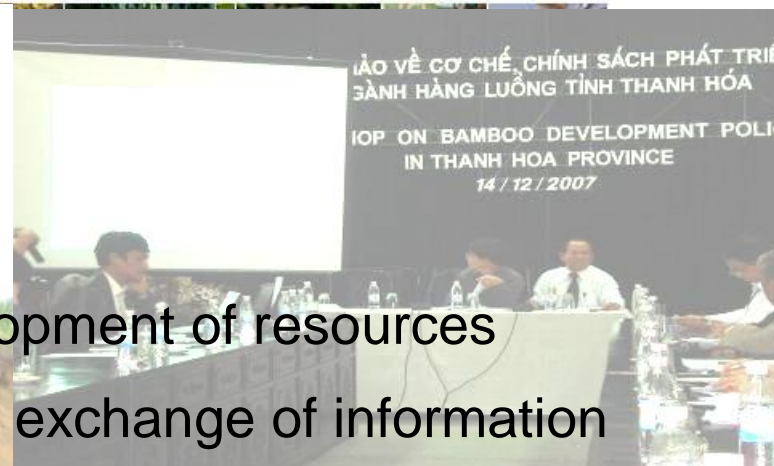
Contents

Part I: Farmers and development of resources

Part II: Dissemination and exchange of information

Part III: Market development, support to entrepreneurs

Part IV: Necessity of establishing a consulting agency



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Part I: Farmers and Resources

Main contents

1. Support to new plantations
2. Intercropping
3. Sustainable management of *luong* forests
4. Orientations for 2009



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1. Area of new plantation supported in 2008

a. Direct support

District	Total	
	Area (ha)	N°. of hh
Ngọc Lặc	62,5	116
Thường Xuân	30,5	31
Quan Hóa	27,3	132
Bá Thước	36,5	60
Total (2 seasons)	156,8	372

b. Indirect support

- N.Lắc - T.xuân: 24 ha, 41 households.
 - Q.Hoá - B.Thước: 11ha, 51 households
- (through buying seedlings/nursery, training, visits, document reading, technical leaflets)



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c. Obstacles - Orientations

- **Obstacles:**
 - Competed by other crops: cassava, sugarcane, acacia, rubber tree.
 - Support policies are not clear, or not applied.

- **Orientations:**
 - Integration with State or private programs if any
 - Limiting support to new plantations as previously planted area should be prioritized (>800 ha since 2005)



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2. Intercropping

2.1. Objectives

- Reducing erosion and improving income for the first 2 years while farmers use soil for *luong* plantations.
- Evaluating intercrops: *groundnut/ soybean/ green bean/ sesame/ and traditional crops of farmers: cassava/ sugarcane/ maize,... what crops are the most suitable for newly planted luong ?*
- Main criteria:
 - Agronomic and economic efficiency;
 - Effect to limit soil erosion;
 - Influence on growth of newly planted *luong* culms.



2.2. Area/households supported on intercropping in 2008

District	Total		In which				Note
			Spring		Autumn		
	Area	No. of hh	Area	No. of hh	Area	No. of hh	
N. Lặc	11,17	111	9,97	100	1,2	11	5 vill/3com.
T. Xuân	0,68	4	0,38	3	0,2	1	2 vill/1 com.
Q. Hóa	3,66	64	2,94	41	0,72	23	2 vill/2com.
B. Thước	9,8	71	9,1	57	0,7	14	2 vill/2com.
4 districts	25,2	250	22,4	201	2,8	49	11 villages/ 8 communes



2.4. Influence of intercrop on soil erosion

Days of heavy rain	Total raindrop (mm)	Weight of soil eroded (kg/ha)		
		Groundnut	Soybean	Maize
<i>Total from 20/5 to 10/6</i>	147	171	370	518
<i>20/6/08 : Harvesting soybean (not covered land)</i>				
26/6/08	144	119	1804	554
<i>9/7/08: Harvesting groundnut, maize field is attacked by wild grass</i>				
9/7/08	19	52	624	504
TOTAL	310	342	2798	1576

- Groundnut contributes reduce soil erosion better than maize and soybean;
- With soybean, less soil erosion than maize, during period before harvesting.

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2.5.Conclusions - Orientations

- Productivity and added value of groundnut make it the most suitable to intercrop *luong*.
- Groundnut L14 is more suitable than L20 and local variety on hilly soils.
- Groundnut contributes reduce soil erosion.
- Productivity of sesame and soybean is low. Soybean: too sensitive to disease/insects
- In 2009, focus to extend groundnut as intercrop in *luong* new plantations.



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3.2.Trial formulas (factors studied)

- Exploitation, harvesting management
- Mechanical impact (turning the soil, half-moon terraces)
- Fertilization: dosage, type of fertilisation.
- Plant protection (against diseases, insects)





3.3.Synthesis of trials on improving *luong* forest

District	Trial type	Trials	N°. formulas / trial	Area (ha)	Year
Thường Xuân	Fertiliser + management	4	3 + 2 + 2 + 3	2,0	2007
Ngọc Lặc	Fertiliser + management	3	3 + 3 + 4	1,0	2007
	Fertiliser + management + plant protection	2	4 + 6	2,0	2008
Quan Hóa	Fertiliser + h-m terraces	5		2,8	2008
	Fertiliser + h-m terraces	1		2,3	2008
Total		15		10,1	-

Notes: 1. In a trial, there are 15 clumps measured, regardless of number of clumps treated

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Results of improving and tending *luong* forest in Cối village, Xuân Phú commune in 2008

No.	Household name	Formula BP : fertiliser SVC : h-m terraces	Clum ps monit ored	New shoots of 2007			New shoots of 2008		
				No. of culm	Medium circumf erence (cm)	No. of culm A, B	No. of culm	Medium circumf erence (cm)	No. of culms A, B
1	Cao Văn Chiêu	SVC+ BP	15	50	25,6	3	64	27,2	10
2	Cao Thị Phụng	SVC+ BP	15	61	21,6	4	62	25,7	23
3	Hà Văn Đạo	SVC+ BP	15	46	24,9	15	44	27,9	30
4	Chương V. Sâm	SVC+ BP	15	43	22,6	9	53	27,9	33
		SVC	15	42	23,2	6	35	28,8	22
5	Cao Văn Tuấn	SVC+ BP	15	48	24,6	20	59	27,7	31
		CLĐ+ BP	15	42	22,5	10	66	25,7	32
6	Chương Hoàn	Control	15	78	24,8	34	78	25,3	24



3.4. General comments on rehabilitation

❖ Main outcomes

- Farmers are aware of necessity of better harvesting management.
- Several farmers harvest at right age on trials – demonstrations plots.
- Through observation, more culms grew, culm circumference increases

❖ Difficulties:

- Plantation density is not equal.
- Few households, area, thus low impact on other households
- Farmers fell culms in trial plot
- No research institute found to cooperate for experimentations .



3.5. Orientations for sustainable forest management

- Forming farmer organizations for sustainable management of *luong* plantations.
- Trials and demonstrations extended in many places (expanding to Ba Thước, Quan Hoá)
- Exchanges with local experts
- Training of trainers, with suitable tools
- Training for farmers
- Cluster intervention:
 - Cooperating with PI & district and provincial agencies for global intervention on clusters
 - Growers => collectors => pre-processing workshops => factories
 - About 100 households in a 200 ha model ...



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Part II: Information dissemination and exchanges

Contents

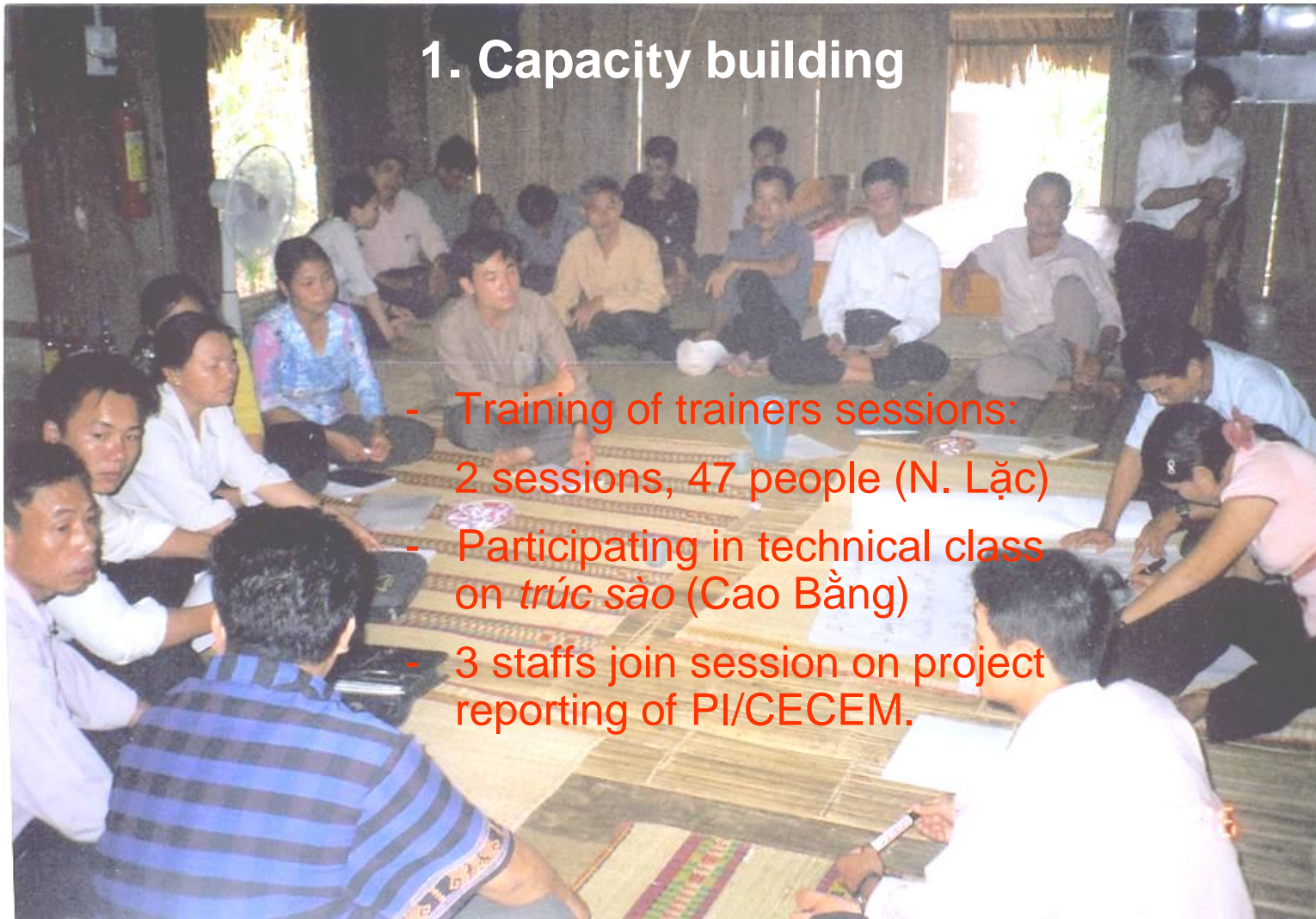
- Capacity building
- Handbook on *luong*
- Technical leaflets
- Leaflets introducing project
- Orientations



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1. Capacity building

- Training of trainers sessions:
2 sessions, 47 people (N. Lặc)
- Participating in technical class
on *trúc sào* (Cao Bằng)
- 3 staffs join session on project
reporting of PI/CECEM.





2. Technical / project introduction leaflets

- 3 leaflets on growing *Linh chi*, wood'ear and shell mushroom on *luong* sawdust
- 3 technical leaflets on growing, tending and managing *luong* forest exploitation
- 3 leaflets introducing LDP project, agro-forestry and value chain activities.
- Each leaflet is printed into 1000 sheets



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3. Elaborating document on *luong* Thanh Hóa

❖ Objectives

- To elaborate a collective document
- To create opportunities for exchanging knowledge on *luong*

❖ Activities

- Gathering information, documents, experience from all levels
- Seminars at district / provincial level
- Discussion with agencies, schools research bodies and institutes,...
- Editorial board to complete handbook



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❖ Achievements

- **1 seminar** in Ngọc Lặc district (06/2008): 15 farmers, 4 “kings of *luong*”, 2 agro-extension centers, 2 offices of agriculture, 1 specialist (Mrs. The)
- **1 provincial seminar** (08/2008): 2 departments, 1 union, 2 schools, 3 centers, 3 branches, 4 offices of agriculture, 4 agro-extension centers
- **1 seminar** (10/2008) / experts of Union of scientific-technical associations
- **Previous name of handbook** : “ basic knowledge on Thanh Hóa *luong* ” is now suggested to be replaced by “Thanh Hoá *luong*”
- Many people suggest adding 2 parts on processing and market



4. Participating to exhibition fairs

- Cooperating with Thanh Hoá department of Science-Technology to participate to Tech Mart exhibition fair in Lạng sơn (August)
- 10 workshop owners from Thanh Hoá joined, connected with 15 other entrepreneurs, companies
- Cooperating with Thanh Hoá department of Agriculture and Rural development to send samples to exhibition-fair in HCM city





5. Orientations

- Cooperating with Mekong Bamboo (MB):
 - + Elaborating 3 technical leaflets; 1 technical calendar.
 - + Finalizing and publishing document on “Thanh Hoá *luong*”.
 - + 1 movie on bamboo *luong* extension.
- Elaborating leaflets raising awareness for farmers:
 - + Benefit of intercropping groundnut among *luong* plantation.
 - + Significance of *luong* plantation compared to short term crops like cassava, maize.
- Cooperating / Department of Science and Technology:
 - + Introduction of LDP and Quan Hoá rural development co-op (CRD) on department technical calendar.
 - + Writing articles for scientific magazine.

Component 3

Support to *luong* value chain development

Main contents

- **Studies and monitoring of *luong* preprocessing**
- **Test production of new potential product (X4 workshop)**
- **Production of mushrooms on *luong* sawdust**
- **Production of waste, tube charcoal and active carbon**
- **Orientations: attracting enterprises to North West T. Hoá**

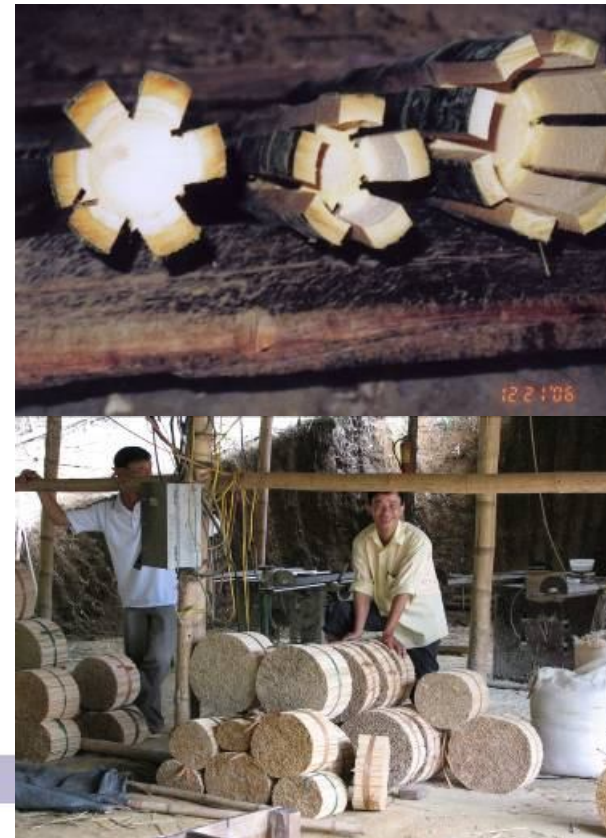




1. Studies on *luong* value chain

1.1 Reasons – Measurement methods

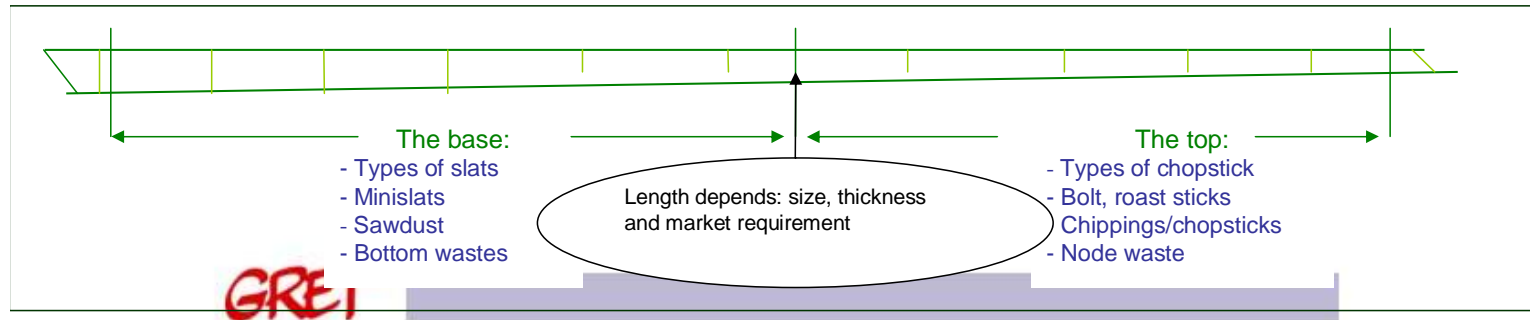
- *Luong* can be used in many ways=> studies/trials need to be done for optimal use.
- Needs of studies to support project's intervention (waste)
- Take at random 1 truck of *luong* (500 culms) to know proportion of different sizes of culms
- Distribution of enough samples (160 culms) in 8 groups (project) and 4 groups (local)
- Measure main parameters of *luong* culm





1.2 Some technical parameters of 3 *luong* sizes

Culm type	Size (cm)	Length (m)	Circumference (cm)	P/culm (kg)	Thickness (mm)	
					Top of pole 1	Top of culm (chopstick)
C-	26 - 28	8,9	27,0	19,5	9,8	5,2
B-	30 - 32	9,1	31,0	27,6	10,5	5,7
A+	36 - 38	10,1	36,9	37,8	10,9	5,5



1.3. Technical parameters for median culm (B⁻)

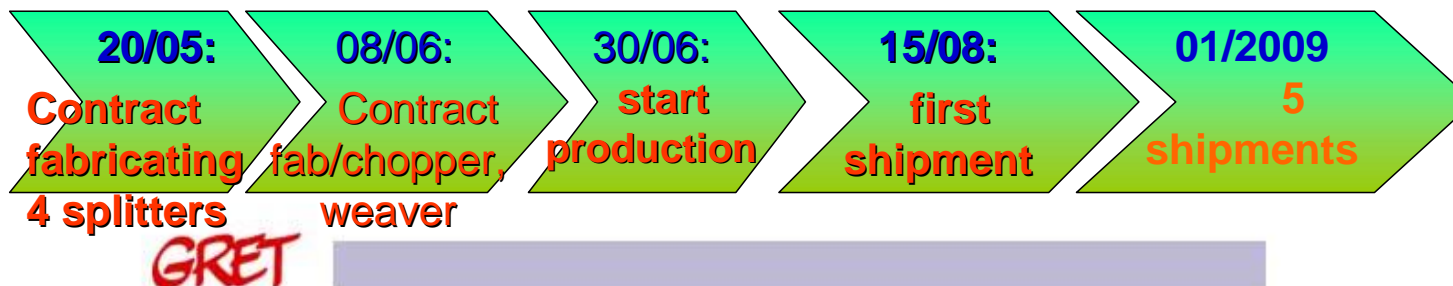
Criteria	Unit	B ⁻ (30-32cm)	
		Quantity	Ratio/culm (%)
Medium Weight (P.)	kg	26 kg	100
1. Slats			
P. of the base for slats	kg	17	65
Σ slats/culm	slat	16	16
P.1 rough slat - ΣP. rough slats	kg	0,54 – 9kg	35
P. Planed slats – P. planed slats	kg	0,32 – 5kg	19
2. Rough chopsticks			
P. Top part	kg	9,0	35
P. Chopsticks	kg	2,3 kg	9
3. Wastes	kg	18,7 kg	72
Slat waste + base + sawdust	kg	8	31
Planning waste	kg	4	15
Chopstick waste + nodes	kg	6,8	26



2. Production of woven mats for boards in X4

2.1 Implementation process

- X4 (Điền Trung) is one of 3 satellites of Sông Mã co-op producing slats and chopsticks
- Due to difficult on markets, material quality, especially for flooring slats
- **=> needs another product to replace**
- Project's support=>1 new product: woven mats for pressed boards
- Sold to a company in Quảng Bình province





2.2 Basic information from trial on 40 culms



Criteria	Unit	Quantity
1. Material	Culm	40
- Medium P /culm	Kg	22,5
2. Woven mats	Mats	105
- Mats/culm	Mats	2,6
- P/1 fresh mat	kg	5,2
- P/1 dry mat	kg	3,0
-%P fresh/P.culm	%	60,2
3. Waste+losses	%	39,8

High use rate (60,2%) / rough chopstick (19,4%), rough slats (22%)

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2.3 Interests in production of woven mats

- **Economic benefit**

- 2,6 woven mats/culm x 3 kg x 5.000 = 39.000 *dong*
- At the beginning, profitability for workshop (8.500đ/culm, 20 million/month)
- New competitive product for the region (compared to slat and chopstick)
- Possibility of using by-products (bark) for fiberboards.

- **Social interest**

- 22 laborers / 1 modern production line

- **Environmental benefit:**

- Not damaging environment (no use of chemical substances for treatment)

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2.4 Technical parameters / 5 products in 5 workshops

Criteria	Woven mats (X4-Đ.Trung)	Rough chopstick (Dũng – N.Tiến)	Refined chopstick (Hà Long-X.Phú)	Rough slat (Thành-H.Xuân)	Planed slat (X5-Xuân Phú)
No. of machines	2	2	1	3	4
Culms /day (culm)	110	300	800	400	1,970
Products/day	226	1,350	1,800	5,000	31,522
Average prod./culm	2.6	4.5	2.5	16	14
P.Product / P.culm (%)	60.2	19.4	10.4	22	13.5
P.1 product (kg)	3.0	1	1	0.57	0.32
Number of laborers	22	16	64	12	18

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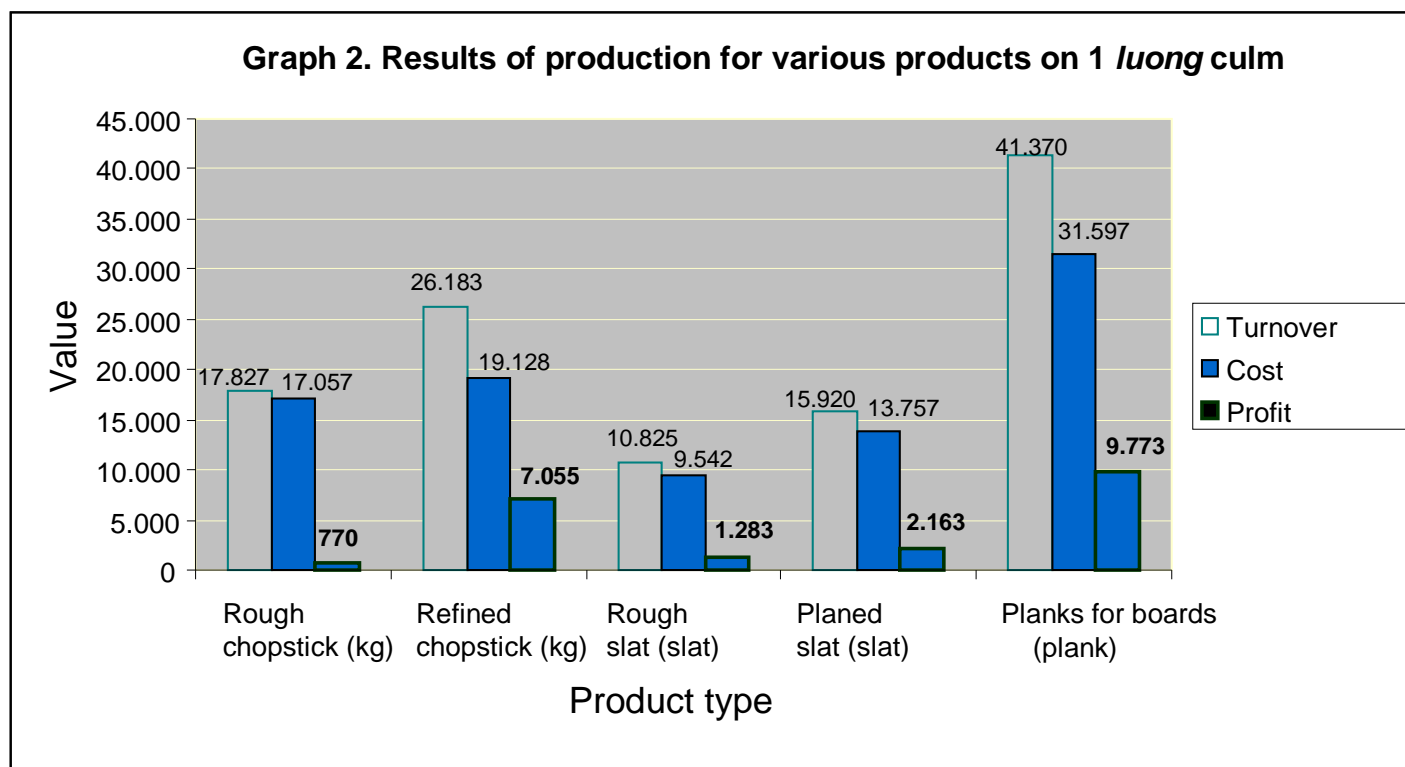
2.5 Economic comparison of 1 culm/ slats - chopsticks

Criteria	Rough chopstick	Refined chopstick	Rough slat	Planed slat	Woven mats
1. Turnover (đ)	17.827	26.183	10.825	15.920	41.370
- Selling waste (d)	4.300	5.200	1.700	272	1.900
2. Production cost(d)	17.057	19.128	9.542	13.757	31.597
3. Profit (d)	770	7.055	1.283	2.163	9.773
4.Efficiency criteria					
-Profit/month (1.000d)	5.700	116.000	5.200	60.700	26.875
-Profit/day (1.000d)	344	4.640	528	1.956	1.075
-Profit/product (d)	171	3.136	104	77	3.759
-Profit/turnover (%)	4,3	26,9	11,9	13,6	23,6

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Graph of economic comparison



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3. Growing mushroom on *luong* sawdust





3.1 Rationale and objectives

- Using by-products of processing units
 - 1.3 – 3.6kg of sawdust/*luong* culm
 - 1 workshop uses 10,000 culms/month
- Protecting the environment of Mã river
- Structural change for farmers production



- A new occupation that suits all ages, increases income for farmers.
- Source of products (safe food, medicine) for the market
- Using redundant laborers

3.2 Activities (1)



3.2. Activities (2)

Content \ Season	Fall-winter (2007)	Spring-fall (2008)	Fall-winter (2008) ⁽¹⁾
1. Distribution of production			
Number of communes	1	2	4
Number of groups	1	2	5
Number of households participating in	11	9	39
2. Technical training			
Sessions	1	1	7
Participations	72	20	141
3. Study visits (<i>people/visit</i>)	0	20/1	12/3 ⁽²⁾
4. Lesson-learning meetings	1	2	Not yet
5. Production (<i>bags</i>)	5,170	6,000	19,482

⁽¹⁾ Data until 11/2008

⁽²⁾ Cross visits among groups organized by farmers

3.3 Economic calculation

Economic profit for 1.000 bags (1 ton of luong sawdust)

Unit: 1.000d

Criteria	Unit	2007			2008		
		Wood' ear	Linh chi	Shell mush.	Wood' ear	Linh chi	Shell mush.
Good quality	%	78	37	82	85	75	90
Yield (dry)	G/bag	57	21	41	61	25	50
Production(dry)	Kg	57	21	41	61	25	50
Selling price/kg ⁽³⁾	1.000 d	50	200	15	36	220	70
Total earning	1.000 d	2.850	4.200	6.210	2.196	5.500	3.500
Total expense	1.000 d	1.660	2.330	1.930	1.537	2.737	1.759
Profit	1.000 đ	1.190	1.870	4.280	659	2.763	1.741

(3) Retail price in Quan Hoá in 12/2007

3.4. Conclusions – proposals

- 3 types of mushroom grow well on *luong* sawdust, in the whole year and suit with existing local conditions
- To concentrate production on farms /co-ops (groups, villages)
- Mushroom production zone to develop into craft village
- To form intermediate place of mushroom supply (2nd, 3rd grade)
- To master product drying technique
- To set up place / collection, preservation, processing and consumption

Two solutions for production organisation		Two directions for products	
			
Concentrated production	Scattered production	Prioritizing drying mushroom and selling to market	On-farm consumption of fresh mushroom



4. Producing bamboo active charcoal

4.1 Necessity to build charcoal kilns

- Treating low value by-products to increase added value of *luong*
- Using small *luong* culms that disqualified to make slats, chopstick (stake *luong*)
- Gradually replacing charcoal from wood in the future
- Forming / developing a brand new sub-sector: bamboo (*luong*) active charcoal.



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4.2 Producing tube charcoal for Korean buyers

a. Technical requirements

- Two different Korean customers
- Small culms/other bamboo species hardly used at present : le, song, ...
- Qualified products (active charcoal) are cut into 10cm sections
- Designing 2 types of baskets, produced in Thanh Hoa province
- Ensuring production of 6,000 baskets, 6 tons of charcoal/month (1 container).



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b. Difficulties, challenges to overcome

- Large demand but not enough product and production capacities are very low
- Project/co-op has to advance money to buy coal (equivalent to 2 containers).
- Bridge between local small producers and big exporters/foreign importers.



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c. Production arrangement / strategy implemented

- Support to building charcoal kilns in different places: 10 kilns are working
- Training 5 workers building kilns and burn charcoal on the spot
- Kiln management to owners so that they are self-motivated (contracts on kiln handling and charcoal supply)
- Technical following-up and buying all products (tube charcoal, crushed coal,...)



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d. Results of trial production of small tube charcoal
(9 kilns=15 cycles, 9.8 tons of charcoal, 4.4 tons of tube)

Place	Kiln name	Σcapacity (m ³)	No of cycles	Charcoal (ton)		Owner
				Tube	Waste	
1.Quan Hoá	X5, X6A, X6B, X6C	57	8	2.4	3.1	Thịnh
2.Lang Chánh	X7A, X7B	30	3	0.9	0.7	Trung
3.Bá Thước	X4A, X4B	20	1	0.5	0.3	Hoà
4.Ngọc Lặc	X9A	15	3	0.6	1.3	Khánh
Total	9	122	15	4.4	5.4	4
In million VNĐ				66	32.4	



4.2 Producing tube charcoal for Korean buyers

e. Economic interest, advantages

- Buying small culms that are not sold before : 500đ/kg in forest
- Bringing high value from tube charcoal (sold at 15.000đ/kg), profit about 20%
- Earning of a labor day: 50.000đ/day
- Creating jobs: 1 kiln = 60 labor days/month
=> 9 kilns 540 labor day, ab. 22 direct laborers
- 1 new activity for craft village: weaving baskets, 6.000baskets/month, 40 laborers.



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4.2 Producing tube charcoal for Korean buyers

f. Social, environmental meaning - Prospect

- **Social interest:**

- Creating many new jobs (80-100 laborers /1 container/ 1 month)

- **Environmental issues:**

- No pressure on *luong* quality (no use of big or immature culms)
- Decrease laborers relying on forest exploitation to earn a living

- **Prospect:**

- 2 Containers (at least 9-12 tons/month)
- Using charcoal from base, slat waste
- 1 activated carbon factory using 1.000 T. of raw charcoal/year in Thanh Hoá city



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4.3 Going to activated carbon production

a. Main common applications of activated carbon

- **Health (medical carbon):** for sterilization and anti-poison; blood filtering agent
- **Chemistry:** catalyst, decolorizing and deodorant agents...
- **Technology: part of air-filtering devices** (in tobacco filter, fridge and air conditioner).
- **Water treatment** (or home water filtering): cleaning micro-quantity dirt, environment treatment.
- **Adsorption of radioactive substances** and harmful rays in houses, offices (avoiding harmful earth rays)

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4.3 Going to activated carbon production

b. Producing from bamboo *luong* in Thanh Hoá suggested

- To support production of *luong* charcoal processing units (kilns in luong valleys)
- Provincial People's committee calls for investors interested to build factory
- Designing activities and asking for professional agencies for promotion
- Supporting the building of an activated carbon factory in Thanh Hoá city





4.3 Going to activated carbon production

c Intervention plan for next months

- Search and call for potential investors to cooperate and build an activated carbon factory in Thanh Hoá
- Select suitable equipments and suppliers (imported)
- Choose enterprises, feasibility study, support elaboration of business plan.
- Survey market demand in country and especially in Thanh hoa province



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Orientations of processing, marketing activities

(1) Expand workshops, entrepreneurs within project's intervention

- Based on the list (more than 30 processing workshops in North West Thanh Hoa) ...
- ...understand current operations, support needs and prospects of workshops
- Continue training sessions on management and exchange among entrepreneurs
- Get to benefit from suitable credit system
- Improve technology of existing workshops (flooring boards, woven mats, strand woven)



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Orientations of processing, marketing activities

(2) Continue intervention at small and medium scale

- Trials, diversification of finished stick types
- Expanding to production of mushroom on sawdust (50-100 T, for > 50 families)
 - 1 organization responsible of inputs/outputs
 - Building kiln to dry mushroom on the spot
- Vocational training, cooperating with province's vocational center
 - 2 teachers to Thien Phủ to teach/20 people
- Developing some craft villages (sticks, rattan, baskets for charcoal,...)



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Orientations of processing, marketing activities

(3) Expand scale, production volume

- Improve charcoal production capacity (from slat, nodes, small culms) on the spot
- Study different ways of using sawdust
- Continue feasibility study to produce activated carbon in Thanh Hoa province
- Bring potential investors, companies to visit workshops and entrepreneurs
- Attract big companies to invest locally:
 - 2-3 investors for activated carbon
 - 2 investors for production of pressed boards (Cẩm Thủy)



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Orientations of processing, marketing activities

(4) Design and implement small supplementary projects

- Sign contracts/tube charcoal, baskets (co-op) and continue feasibility study/activated carbon
- Project of rattan plantation and processing (Quan Hoá, Bá Thước - 100 million VND)
- Project of support to handicraft development and vocational training (QH,BT-110 million VND)
- Project of development of value chain and environment on the basis of optimal use of *luong* sawdust, wastes (renewable energy)
- Project of capacity building for consulting co-operatives, and linked local organizations



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Proposals, questions to *luong* value chain

Policies for processing activities and charcoal production

- Bank, credit system suitable for demand of small and medium enterprises ?
- Policies ensuring adaptation between material zone (resources) and enterprises development
- Sustainable exploitation of forest guaranteed ?
- Participation and facilitation of provincial authority for production of active carbon in T.Hoá province ?
- What about building bamboo processing factory in industrial zone of Cẩm Thủy town?



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Proposals, questions to *luong* value chain

Policies for vocational training, handicraft, consultancy

- How to support establishing of value chain and enterprise association ?
- What about the current training system ?
- Policies for craft village development ?
- A store presenting different products made from *luong* in Thanh Hoá city ?
- 1 center or co-op for agricultural and value chain development in Quan Hoá ?



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Part 4 : Necessity of building a consulting agency

1. Reasons – Situation:

- ♣ Products of *luong* value chain : diversified and promoted in seminars, exhibition fairs, ...
- ♣ Many enterprises want to cooperate: research, process, resources, consultancy...
- ♣ Ability to sign contract is a requirement
- ♣ Small projects need a basis in remote areas to help develop rural areas
- ♣ Model of Hadeva consulting co-operative (Phú Thọ) working effectively for 4 years

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2. Objectives:

- ♣ To reduce poverty, create jobs, in a sustainable way, in such a remote area
- ♣ Support the development of *luong* value chain through local organizations.
- ♣ Promote initiatives of senior staff
- ♣ Support production and trade of non timber forest products and agro-forestry products.
- ♣ Attract national and international projects for province's rural development field.

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3. Model of consulting agency to be established

- According to Vietnam's Law of Co-operative (1/7/2004)
- Members: mainly experienced engineers from Thanh Hoá (about 2/3 of staff)
- Name: Co-operative for Rural Development Quan Hóa – Thanh Hóa
- Acronym: (CRD)
- Head office: Xuân Phú commune - Quan Hoá district – Thanh Hoa province
- A group of staff is detached from LDP to form and develop co-op in the future.

Hợp tác xã phát triển nông thôn
CRD Quan Hoa - Thanh Hoa
Cooperative for rural development

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Hợp tác xã phát triển nông thôn
CRD Quan Hoa - Thanh Hoa
Cooperative for rural development



4. Some operating principles:

- ♣ No competition with companies, enterprises in the area or outside.
- ♣ Mainly consultancy and transfer.
- ♣ Support to new value chain, product and gradually reduce role when other stakeholders, enterprises taking over
- ♣ Cooperate with partners on basis of fairness and mutual benefit.

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5. Field intervention, CRD is ready to supply:

- ☞ **Consultancy on new technology** in field of bamboo *luong* processing.
- ☞ **Vocational training and job creation** on the spot, to diversify incomes.
- ☞ **Support to enterprises** in terms of market, customer.
- ☞ **Determine demand, design**, organize training sessions for farmers.
- ☞ **Cooperate with organizations** in implementation of programs, projects

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CRD Quan Hoa - Thanh Hoa
Cooperative for rural development

6. Main activities in coming time

- Finalize procedures to start operations
- Foster *luong* charcoal contract/Korean customer
- Consulting on building factory and resource zone for two companies.
- Realize some contracts with LDP project.
- Elaborate 2-3 small projects : vocational training, eco-tourism, growing rattan and mushroom, ...



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7. Proposals

- **To district and province's agencies in Thanh Hoá:**
 - + Facilitation in terms of policies and institution (establishment, license issuance...)
 - + Allowing the implementation of tasks involving rural development in the province, district.
 - + Facilitation for signing contracts of consultancy, bamboo charcoal export...
- **Proposals to GRET, MB, other partners**
 - + Capacity building: improving organization, skills, project elaboration, ...
 - + Cooperation in research.

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Thank you very much!

