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**DEVELOPMENT OF AN INTERGRATED LAND USE STRATEGY  
FOR NA-NHAN COMMUNE, DIEN BIEN DISTRICT,  
DIEN BIEN PROVINCE**

**CONSULTATION WORKSHOP REPORT**

**Prepared by:** Do Trong Hoan (World Agroforestry Centre)  
Vu Tan Phuong (Vietnam Academy of Forest Science)  
Nguyen Van Truong (Vietnam Academy of Forest Science)

*Dien Bien, 14 December 2018*

## 1. Objectives:

In the context of integrated landscape management in rural areas, multi-stakeholder platforms are important means to contribute to achieving the goals of conservation, emission removals, livelihoods and agricultural production. Participatory planning and decision-making is an essential part of a governance mechanism desired by stakeholders in a landscape fraught with conflict of resource use and stakeholder interests. In this study, we conducted a stakeholder consultation workshop with 48 participants representing Dien Bien province and Na Nhan commune stakeholders, including the Department of Agriculture and Rural Development (DARD), Department of Natural Resource and Environment (DONRE), commune leaders, agriculture extension staff, environmental and cadastral staff, village heads and villagers. The overall objective of the workshop is to forge common understanding and create a vision amongst stakeholders toward an integrated commune land use/management strategy: goals, plausible interventions, actors involved, and support needed. The workshop employed simple visual methods to aid participants in the discussions.

## 2. Time and venue:

- Time: 14/12/2018.
- Venue: Him Lam Hotel, Street 6, Him Lam district, Dien Bien Phu city, Dien Bien province

## 3. Workshop contents

- a. Opening and introduction (Dr. Vu Tan Phuong and Dien Bien's Agriculture Extension)
- b. Presentations and discussions on and use changes in Na Nhan commune and legal frameworks for local land use planning development:
  - Presentation 1: Legal frameworks for land use plan and land use planning development: a review (by Dr. Vu Tan Phuong).
  - Presentation 2: Land use changes and impacts on ecosystem services in Nà Nhàn commune (by Do Trong Hoan and Nguyen Van Truong).

After the presentations, participants were divided into two groups to discuss local land use administration issues (land use types, landowners/users, management practices and ssats), and issues on past land use changes, particularly driving forces of land use changes in the period of 2005-2015.

- c. Presentation and discussion on integrated land use scenario development:
  - Presentation 3: Integrated, tree-based land use scenario development for Na Nhan commune (by Do Trong Hoan).

After the presentations, participants were divided into two groups to develop land use scenarios for Na Nhan commune that would, based on local perspectives, ensure ecosystem services delivery of the landscape. The discussion followed the format of a back-cast visioning exercise.

- d. Concluding remarks (Dr. Vu Tan Phuong)

## 4. Results

During the workshop, participants were divided into two groups (random) to facilitate their discussions. Since results obtained of two groups are somewhat similar, we report them as one group while making sure that all different perspectives are captured.

### 4.1 Land management:

Discussions on land use management in Na Nhan commune are summarized in Table 1 below.

**Table 1.** Land use management in Na Nhan commune

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Land use type	Land owners/users	Status
Natural forest (for protection and development)	- Communities (as villages): 22 villages	- Managed by 22 village communities - Forest patrolling is covered by PFES: VND 500 million/commune/year (for 3,000 ha of forest)
Planted production forest	- Households (management)	- Planted timber species: <i>pine</i> , <i>acacia</i> , <i>eucalyptus</i>
Planted protection forest	- Households (patrolling)	- First timber plantation model was introduced in 1977
	-	- Lack of market for timber products, timber plantation models were not successful
Shifting cultivation land	- De facto management by households	- Land is often used for annual cropping, fallow period: 4-5year
	- Unallocated (administered by CPC)	- Most households have committed (with commune's authorities) not to expand area of this type land use
		- Main crops: rice, cassava, canna
Homestead+home garden	- Households	- Managed by households, mostly for their own consumption, with very little or no inputs at all.
Perennial crops	- Households (farms)	- Tree species: plum, coffee, macadamia, etc. - Small area, often fragmented in shifting cultivation land
Terrace rice	- Households	- Household consumption, 1-2 crops/year depending on water availability
	-	

It was found from the group discussion that since 1970s large areas of forest land in the mid and upland in the commune were assigned for forestry under the management of State Forest Enterprises (SFEs) and Forest Management Boards. This was part of a broader effort to transform rural resource use and traditional social structures in mountainous areas that included large-scale resettlement and sedentarization programmes. This led to state policies overriding customary land management. The 1993 Land Law and other regulations tried to decentralize state management and devolve forest management to non-state entities (individuals, households and organizations), but not to customary village communities or groups of households because communities were not recognized as legal entities and could not receive LURCs. However, since mid 2000s, forest land allocation to local communities was enabled by Forest Protection and Development Law (2004) and since then a number of villages have been allocated forest lands that were managed by FMBs before. Some households were allocated with production forest to plant trees as it was believed that for commercial plantation individual households can perform better than collective actions.

For shifting cultivation land, the situation is more complicated. Land cleared from forest is less likely to be issued with a Land use right certificate (LURC). Agricultural land that has been allocated for cultivation in theory can be used for shifting cultivation but not land classified as forest. As a consequence, most local households do not have LURC for their shifting cultivation land. In general, shifting cultivation is not encouraged because the government believes it is detrimental to the forest. Moreover, participants who represented government authorities claimed that shifting cultivation is difficult to manage because people are spread throughout secondary forest (fallow) areas. Even though shifting cultivation is discouraged, authorities acknowledge that it continues to be practiced.

### 4.2 Land use changes and causes of land use changes

Discussions on past land use changes and causes of changes are summarized in Table 2 below.

**Table 2.** Local assessment on causes for land use changes

Land use	Changes in area in 2005-2015	Causes of changes
Natural forest	Increased (+)	- Forest protection and rehabilitation programs - Community forest management activities: each village has one forest protection group

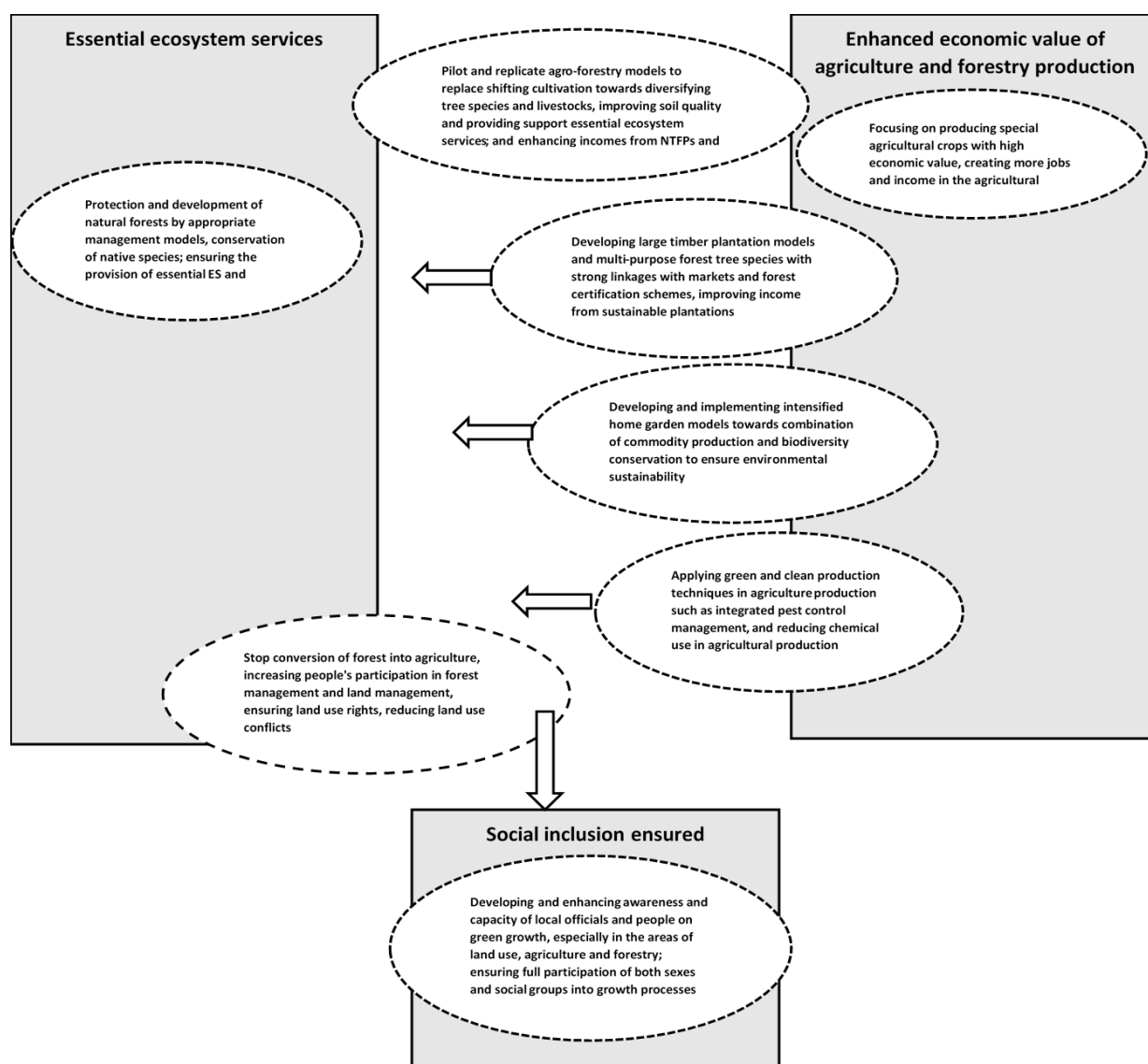
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Land use	Changes in area in 2005-2015	Causes of changes
Upland annual crops	Decreased (-)	<ul style="list-style-type: none"> <li>- Changes in land use objectives from production to forest restoration</li> <li>- Low production and low income for farmers. Farmers have turned their focus onto investment and production of wet rice rather than upland crops</li> </ul>
Wet-rice cultivation	Stabilized/ slightly increased (0)	<ul style="list-style-type: none"> <li>- Intensive cultivation techniques (two rice crops/year)</li> <li>- Rice productivity increased to 5-6 tons/ha/year</li> <li>- Food supply has been secured; local households have recently experienced no food shortages</li> </ul>
Planted forest	Decreased (-)	<ul style="list-style-type: none"> <li>- Unsuccessful plantation efforts: lands designated for forest plantation have gradually regenerated to poor and restored natural forest</li> <li>- Pine forests planted in the period of 1975-1979 were lost (due to pests and illegal logging) during 2005-2015, and then natural regeneration took place</li> </ul>
Bare land	Decreased (-): changes to poor natural forest and annual crops	<ul style="list-style-type: none"> <li>- Some upland fields have been abandoned (as bareland) and evolve back to forests (regeneration, about 2,000 ha)</li> <li>- Offset planting of some development projects targeting barelands (+600 ha)</li> <li>- Reclamation efforts of local farmers (2005-2007)</li> </ul>

During the period 2005-2015, most of the bare land with fallow was either restored to poor secondary forests or re-used for agricultural production. Previously, the traditional farming practices of local people were mainly slash and burn for the cultivation of agricultural crops. After continuous cropping, soil is eroded and nutrients depleted, leading to a dramatic decline in the yield of food crops—with such condition, the soil is left unused for 5-6 years to restore its fertility. Since 2006, with the dissolution of the Dien Bien district Afforestation Yards, most of the forest and forestlands were allocated to the Commune People's Committee with the participation of the village communities. Some villages in Na Nhan commune have applied the form of community forest management with clear regulations on forest protection and management. The villagers were allowed to harvest certain volume of timber from the community forest for housing construction under supervision of the village communities. Therefore, deforestation or slash-and-burn practices has been minimized. However, forest plantation was less successful, some planted forest areas were lost and displaced by agricultural expansion or natural regeneration. According to workshop participants, this was largely attributable to the lack of markets for timber products in the area.

### 4.3 Development of land use plan goals and strategies for Na Nhan commune

The back-cast visioning exercise resulted in a balanced articulation of stakeholders on the future of their landscape, that are (1) pursuing high value agriculture production through “clean” agriculture and agroforestry cultivation measures, (2) maintaining and improving essential ES, particularly water regulation, biodiversity, and carbon sequestration services, and (3) ensuring social inclusion in development through appropriate landscape governance mechanisms. Although there was divergence in stakeholders’ opinion about the importance of agroforestry as a sustainable practice (some participants argued that agroforestry is not suitable for commercial agriculture production in the commune, but some other participants provided counter examples), participants to the workshops have arrived at three main goals above, and emphasized that their agricultural production measure must be adjusted to preserve landscape integrity and beauty, and deliver better economic opportunities to local residents. They also discussed and agreed on strategies to achieve these goals as shown in Figure 1 below. The strategies were initially developed for each goal but mapping the results by stakeholders revealed that many of them are “shared”, in which one strategy may contribute to more than one goals.



**Figure 1.** Goals and strategies of the Integrated Land Use plan of Na Nhan commune

After developing the goals and strategies, participants were divided into two groups and asked to fill up the table of interventions as shown in Table 3 below. Each intervention must be linked with a specific land use type, with area and location where the respective intervention will be conducted. Participants were also asked to indicate the priority level for each intervention, i.e. high (intervention should be carried out as soon as possible), medium (intervention should be implemented within 5 year), and low (intervention can be implemented after 5 year). Many interventions are suggested based on perceived benefits of tree-based land uses, and all interventions seemed to result in positive impacts on the environment and emission reduction. All agreed that natural forest should be well protected for essential services, and villages should be supported to develop and obtain sustainable forest management plans. Some understory agroforestry models were also recommended to help local farmers obtain more incomes from forest and reduce pressures on forest resources. Participants suggested that economically viable models of forest plantation (acacia plantation and some native timber plantations) should be developed in parallel with market value chain development for timber. This reflected their concerns on past failures in forest plantation in the landscape. *Michelia mediocris* plantation thus can partly address this concern as the tree can provide valuable fruits used as spice and herb, and some participants said they want to plant *Michelia mediocris* even without the need of to sell timber. Conversion of upland crops to agroforestry and intensification of mixed gardens were expected to address productivity and soil degradation concerns, but intensive external financial and technical supports were also required. In the field of agricultural production, participants wished to pursue intensification of annual crops such as peanut and taro by cleaner cultivation methods and value chain development and invest in livestock farming where

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grazing lands are available (Na Noi and Na Pen villages). Participants also suggested relevant stakeholders for each intervention and in most cases agriculture and forestry extension workers, and commune's people committee (CPC) were expected to provide support and guidance, and this highlights the need to the develop capacity for these local agents in facilitating local land use plans.

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**Table 2.** Local assessment on causes of land use changes

Land use type	Proposed intervention	Priority level	Area	Locations (village name)	Support policy needed/ currently available	Stakeholders
Natural forest	Forest protection and enrichment (G1), improvement of community forest management capacity for forest protection groups (G2)	High	~3000 ha	All villages that have allocated natural forests	<ul style="list-style-type: none"> <li>- Capacity building</li> <li>- Support to development of forest management plans (hiring consultant, etc.)</li> </ul>	FPD, forestry extension, CPC, and village communities
	Development of understory NTFPs production models (Cardamom, Amomum, etc.) (G1)	Medium	-			
	Develop ecotourism models(G1)	Low	-			
Plantation forest	Planting protection and production forests (G1)	Medium	-	Tau Pung and Na Nhan villages	<ul style="list-style-type: none"> <li>- Land allocation</li> <li>- Investment (capital and technology)</li> <li>- Market development</li> </ul>	DARD, DPC
	Develop Acacia plantation models in combination of market solution (G2)	High	200 ha	Tau Pung and Na Nhan villages	-	-
	Afforestation on barelands with native species such as <i>Schima wallichii</i> and <i>Michelia</i> (rotation of 10-15 year) (G2)	High	100 ha	Bareland in Na Nhan village	-	-
Upland crops	Agroforestry: select suitable species, fruit trees (G1)	Medium	-	11 villages with upland fields	<ul style="list-style-type: none"> <li>- Capital investment</li> <li>- Technical assistance and training</li> <li>- Market value chains development</li> </ul>	Agricultural and forestry extension, CPC, village communities
	Planting fruit trees, scattered forest trees and agroforestry (G2)	Medium	50 ha fruit trees; 30 ha of agroforestry	Na Noi 1, Huoi He, and Tau Pung villages	-	Households Agricultural and forestry extension
	Determination of fruit growing areas (G1)	Medium		Na Nhan 1, 2, 3; Na Doc Tau Pung 1, 2 villages Na Noi 1, 2; Huoi He, and Huoi Hoc villages	<ul style="list-style-type: none"> <li>- Financial and technical support</li> <li>- Market development</li> </ul>	DPC, CPC, households and local enterprises
	Development of taro plantation area (G2)	High		Na Noi, Na Ngam, Huoi He, Tau Pung villages	-	-
Grazing land	Cattle grazing (G1)	High		Na Pen Na Noi	- Grass planting techniques and land allocation	Agricultural and forestry extension, Provincial Livestock Center
Agricultural production land (Rice land, vegetables)	Applying technical advances to improve rice productivity and quality (G1)	High		Whole commune	<ul style="list-style-type: none"> <li>- Technology transfer</li> <li>- Capacity building</li> <li>- Investment / expansion</li> </ul>	Agricultural and forestry extension DARD, CPC and villagers
	Develop high-value peanut cultivation models and peanut value chains (G2)	High	50 ha	Na Noi, Na Ngam, Huoi He, Tau Pung villages	-	-
Residential land + mixed garden	Improving mixed gardens with several fruit tree species (such as Mango, pomelo) and some timber trees	High	100 ha	Whole commune, Na Noi and Na Ngam villages would be prioritized	-	-
Canna processing factories	Wastewater treatment (G1) (currently 3 canna processing factories are discharging wastewater directly into rivers)	-	-	Huoi He, Na Noi, Na Nhan 3 villages	- Tightened regulations on wastewater control and treatment	DARD, DONRE

## 5. Next steps

Local perspectives on integrated land use scenarios in Na Nhan commune will be used as inputs for model projection of their ecological impacts. Results of projection will be informed to participants and other stakeholders in following up events.

## Annex 1. List of participants

TT	Full name	Tên cơ quan và chức vụ (nếu có)	Contact (Tel, email...)
1	Đỗ Trọng Hoàn	ICRAF Vietnam	<a href="mailto:T.Do@cgiar.org">T.Do@cgiar.org</a>
2	Vũ Tấn Phương	Vietnam Academy of Forest Science	<a href="mailto:phuong.vt@vafs.gov.vn">phuong.vt@vafs.gov.vn</a>
3	Nguyễn Văn Trường	Vietnam Academy of Forest Science	<a href="mailto:truong.nv@vafs.gov.vn">truong.nv@vafs.gov.vn</a>
4	Nguyễn Thị Ngọc Hà	Vietnam Academy of Forest Science	0936776818
5	Hoàng Nguyễn Việt Hoa	Vietnam Academy of Forest Science	<a href="mailto:hoa.hnv@vafs.gov.vn">hoa.hnv@vafs.gov.vn</a>
6	Đào Lê Huyền Trang	Vietnam Academy of Forest Science	<a href="mailto:huyentrang0804@gmail.com">huyentrang0804@gmail.com</a>
7	Đặng Thịnh Triều	Institute of Silviculture	0983174696
8	Lò Văn Thanh	Institute of Silviculture	0941028886
9	Lê Thị Hạnh	Institute of Silviculture	0902691086
10	Lò Thị Minh Nhân	Dien Bien's Agriculture Extension	0915624342
11	Định Thị Thu Hà	Dien Bien's Agriculture Extension	0912676599
12	Đặng Thị Tuyền	Dien Bien's Agriculture Extension	0333088967
13	Lò Thị Chấn	Dien Bien's Agriculture Extension	0914669522
14	Đậu Thị Giang	Dien Bien's Department of Forest Development	0985401102
15	Trần Văn Hoàn	Dien Bien's Department of Forest Protection	0918623116
16	Đặng Thị Thu Hiền	Dien Bien's Forest Protection and Development Fund	0973711609
17	Lê Văn Huy	Vice Director, Center of Agriculture and Forestry Planning and Projection, Dien Bien province	0386346868
18	Lò Xuân Hạnh	Dien Bien's Department of Planning and Investment	0362990066
19	Trần Thị Thanh Xuân	Agriculture Extension Station, Dien Bien district	0982660892
20	Vì Thị Thế	Agriculture Extension Station, Dien Bien district	
21	Nguyễn Hồng Thắng	Vice Director, Division of Agriculture and Rural Development, Dien Bien district	
22	Nguyễn Thị Mai	Division of Agriculture and Rural Development, Dien Bien district	
23	Lò Văn Thơm	Cadastral staff, Na Nhan commune's People Committee	0971254388
24	Lò Thị Chung	Extension staff, Na Nhan commune's People Committee	
25	Quảng Văn Bình	Extension staff, Na Nhan commune's People Committee	0352148223
26	Lường Tiến Cường	Cadastral staff, Na Nhan commune's People Committee	



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TT	Full name	Tên cơ quan và chức vụ (nếu có)	Contact (Tel, email...)
27	Lường Văn Hiến	Nà Ngám 3 village, Na Nhan commune, Dien Bien district	
28	Quảng Văn Chung	Nà Nội 2 village, Na Nhan commune, Dien Bien district	
29	Lù Văn Nội	Nà Ngám 2 village, Na Nhan commune, Dien Bien district	
30	Quảng Văn Tài	Bản Nà Ngám 3 village, Na Nhan commune, Dien Bien district	
31	Lường Văn Hinh	Bản Nà Ngám 4 village, Na Nhan commune, Dien Bien district	
32	Lò Văn Tiên	Bản Huổi Hẹ 1 village, Na Nhan commune, Dien Bien district	
33	Quảng Văn Thơm	Bản Nà Nội 2 village, Na Nhan commune, Dien Bien district	0344141862
34	Cà Văn Tiếp	Bản Nà Nội 1 village, Na Nhan commune, Dien Bien district	0839571447
35	Đều Văn Sáng	Bản Tà Pung 1 village, Na Nhan commune, Dien Bien district	
36	Lò Văn Phe	Bản Tà Pung 2 village, Na Nhan commune, Dien Bien district	
37	Lường Văn Khặt	Bản Nà Đốc village, Na Nhan commune, Dien Bien district	
38	Lò Văn Diện	Bản Huổi Hộc village, Na Nhan commune, Dien Bien district	
39	Đường Văn Chung	Bản Nà Ngám 1 village, Na Nhan commune, Dien Bien district	
40	Lò Văn Pó	Bản Nà Ngám 4 village, Na Nhan commune, Dien Bien district	
41	Quảng Văn Am	Bản Nà Đốc village, Na Nhan commune, Dien Bien district	
42	Quảng Văn Kim	Bản Huổi Hẹ 1 village, Na Nhan commune, Dien Bien district	
43	Và A Cửa	Bản Pá Khôm 1 village, Na Nhan commune, Dien Bien district	
44	Lường Văn Thịnh	Bản Nà Nhạn 1 village, Na Nhan commune, Dien Bien district	
45	Và A Tổng	Bản Nà Pen 3 village, Na Nhan commune, Dien Bien district	
46	Lường Văn Nội	Bản Nà Ngám 1 village, Na Nhan commune, Dien Bien district	
47	Lò Văn Ượng	Bản Pá Khôm 2 village, Na Nhan commune, Dien Bien district	
48	Quảng Văn Loan	Bản Huổi Hẹ 1 village, Na Nhan commune, Dien Bien district	

**Annex 2. Workshop agenda**

<b>Time</b>	<b>Content</b>	<b>Responsibility</b>
<b>14/12/2018</b>		
07.30-08.00	Registration	VAFS
08.00-08.10	Opening remarks and introduction	VAFS/Dien Bien's Agriculture Extension
08.10-09.00	<ul style="list-style-type: none"> <li>Legal framework on land use plan development: status and limitations</li> <li>Questions and Answers</li> </ul>	Vũ Tấn Phương
09.00-09.50	<ul style="list-style-type: none"> <li>Land use changes in Na Nhan and impacts on ecosystem services</li> <li>Questions and Answers</li> </ul>	Đỗ Trọng Hoàn Nguyễn Văn Trường
<b>09.50-10.10</b>	Group photo, coffee break	
10.10-11.40	<b>Group discussion:</b> <ul style="list-style-type: none"> <li>Stakeholder mappings and gaps/limitations in commune level land use planning development</li> <li>Causes of land use changes and benefits from different land uses</li> </ul>	Vũ Tấn Phương Đỗ Trọng Hoàn All participants
<b>11.40-13.30</b>	<b>Lunch</b>	<b>All participants</b>
13.30-14.00	<ul style="list-style-type: none"> <li>Khung lồng ghép tăng trưởng xanh trong lập kế hoạch sử dụng đất cấp xã</li> <li>Questions and Answers</li> </ul>	Đỗ Trọng Hoàn
14.00-16.30	<b>Group discussion:</b> Development of integrated land use scenarios for Na Nhan commune	Đỗ Trọng Hoàn Vũ Tấn Phương All participants
16.30-16.45	<b>Coffee break</b>	
16.45-16.00	Group reporting and workshop conclusion	Vũ Tấn Phương

### Annex 3. Workshop photos



Presentation: legal framework for commune land use plan development



Presentation: land use changes in Na Nhan commune



## Workshop report



Group discussion 1



Group discussion 2



## Workshop report



Presentation: a practical framework for integrated land use plan development in Na Nhan commune



Group discussion to develop integrated land use scenarios in Na Nhan commune