

# Contribution to the Working Group 3: Strategic Goal C

To improve the status of biodiversity by  
safeguarding ecosystems, species and  
genetic diversity

**SDM 2016 and the follow-up**

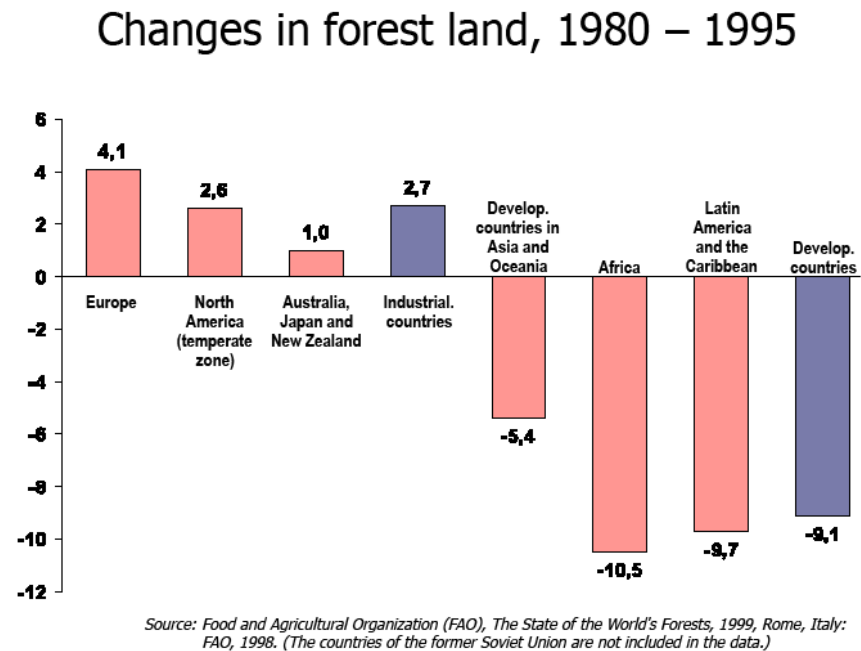
Presenter: Dang To Kien

(Now, Community Entrepreneur Development Institute (CENDI)

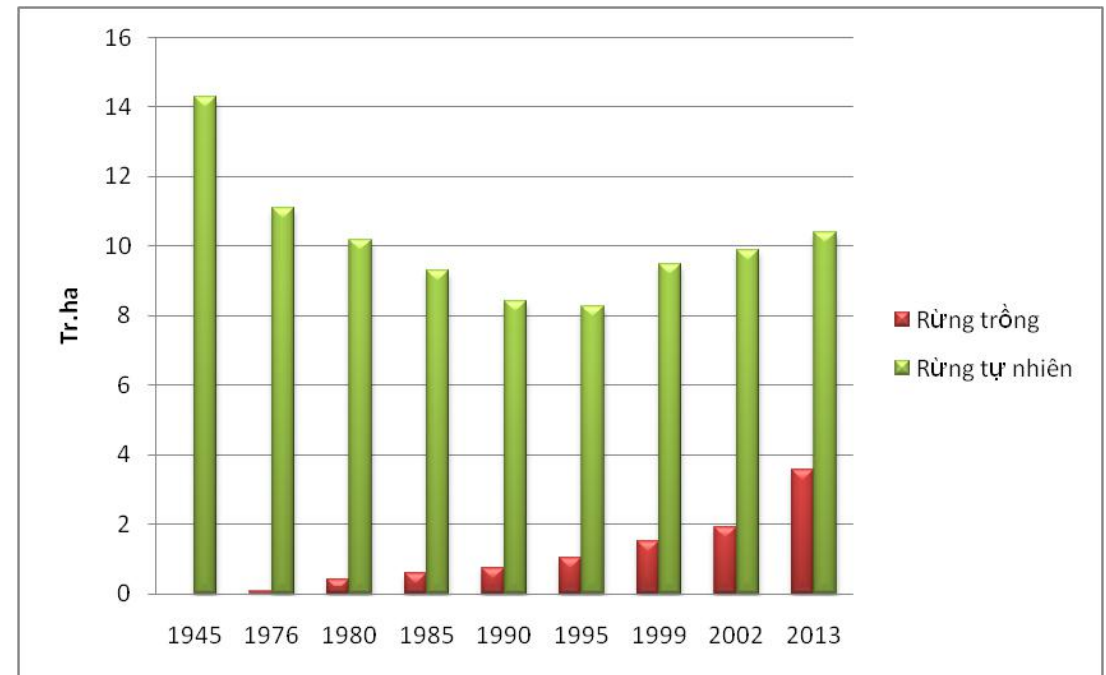
Earlier, Social Policy Ecology Research Institute (SPERI)).

# Why restoration needed?

## Asia wide context



## Vietnam's change in forest land



# Challenges in Vietnam and Lao PDR

Land use change/Forest destruction due commercial agriculture



Former rainforest area is turned by commercial agriculture i.e. **areas of no biological or agricultural higher value in between very short time of < 10 years**

Hazard Soil Erosion


**To built in 1 cm of precious top soil about 500 years are needed**



**Skinned landscapes like this in Northern Laos will loose with each rainfall some millimeter of precious top soil.**

# Why restoration an opportunity?

**Global Challenge!**



In the neo-liberal context, new form of dependency faced by:  
Watershed Indigenous Communities and Young Generation Identity at risk

**15 LIFE ON LAND**  
Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

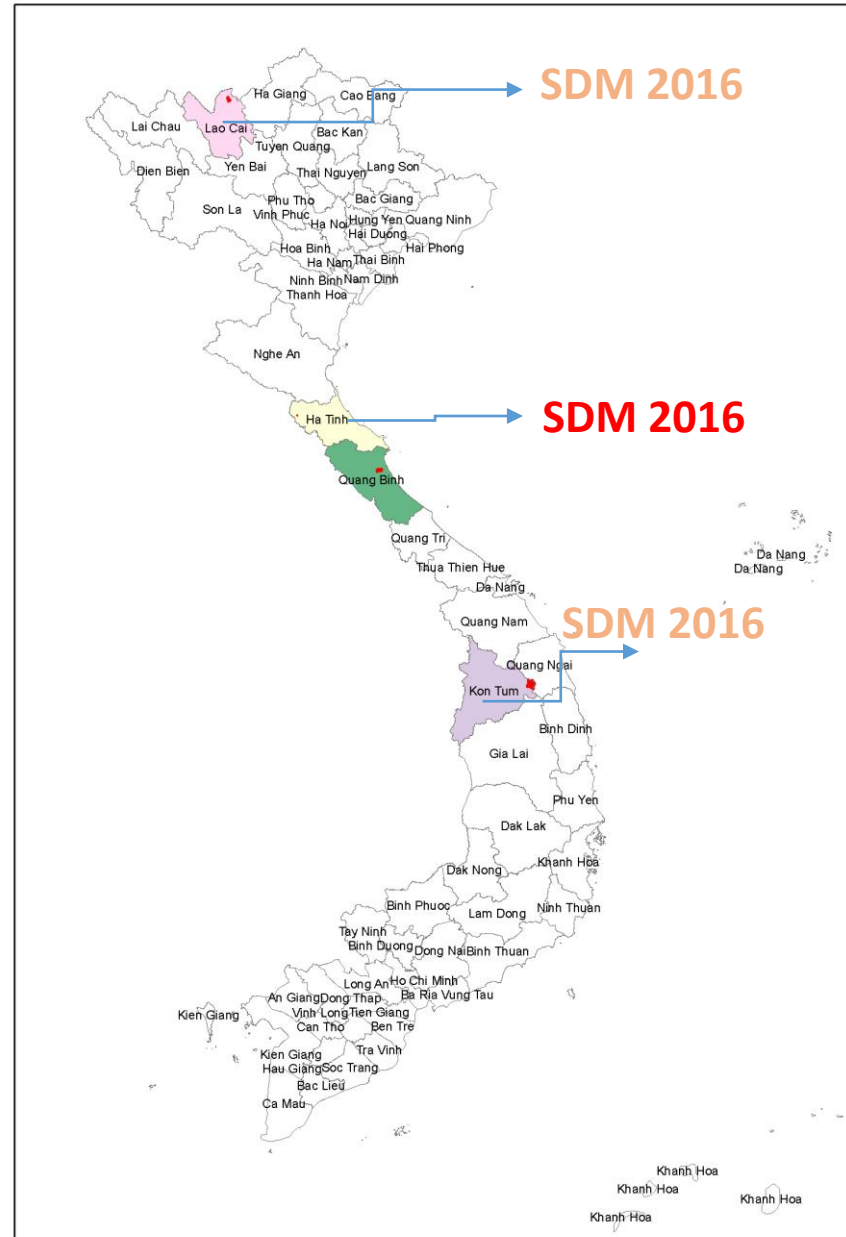
**2bn** Hectares with opportunities for forest landscape restoration

Source: Global Partnership on Forest Landscape Restoration

## Vietnam targets 4.6 million ha by 2030



# Map of project site



# Executive summary of SDM results

- Restore more than 08 local native tree species with more than 20,000 seedlings production.
- Planted 2,379 trees of the 13 local species over 5 farming areas extending on 5 hectares.
- 200-250 benefitted from practical seminars, visiting groups, study-exchange groups, and short courses, and also accessed seedlings for further plantings on farms.
- 500-1000 people raised awareness on importance of local tree species and engaging in plantings for restoration of local knowledge and ecosystem services for SEPLS.
- One poster and video printed and shared to many areas and stakeholders.
- 500 copies of 48-page documentation on seeds gathering, seeds collection, seeds treatment, to nursery processes and how to planting, shared to stakeholders in Vietnam and Laos PDR.

HEPA Eco-farming School

**Figure 1: Total number trees planted for each farming area and total number of each tree species (FFS-HEPA 2016)**

No.	Tên loài/ Name of local species in local Vietnamese	Vườn Lim area (Bản đồ Khu Linh Mộc - Tồn Ká)	Khu Linh Mộc và 7 gian area (Bản đồ Khu Linh Mộc - Tồn Ká)	Cây Khế farm (Bản đồ Khu Cây Khế, Thượng Uyển)	Rào Àn farm	Total
1	Cồng trắng	335	239	220		794
2	Sao đen	10	9			19
3	De	170	122	120		412
4	Giổi mỡ	190	144	-		334
5	Vạng	50	125	-		175
6	Trường mật			150		150
7	Bồ hòn	20		50		70
8	Dẻ hạt cau	80	20			100
9	Lát hoa	80				80
10	Xoan đào	70				70
11	Vàng tim	50	90			140
12	Mít	35				35
13	Xoan dâu				350	350
	Total of trees planted	1090	749	540	350	2379
	Total area (ha)	2.2	1.4	1.4	0	5

# Figure 2: Total number trees species and number of seedlings produced from nursery (FFS-HEPA)

Year	Number of local high valued tree species restored	Number of seedlings of local tree species produced
2014	04/10	3,000
2015	04/10	3,000
<b>2016</b>	<b>08/13</b>	<b>20,000/30,000</b>
2017	06	10,000 & sharing to other regions
2018	06	10,000 & sharing to other regions





# Important species at site

English common name (Local name)	Scientific name	Description
Cồng trắng	<i>Castanopsis cerebrina</i> (Hick. et A. Camus) Barnett, 1944 Fagaceae	Valuable timber tree species for housing material and income.
Mỡ (Giổi Mỡ)	<i>Manglietia conifera</i> Dandy, 1930 Magnoliaceae	Valuable timber tree species providing multi-purpose domestic uses.
Xoan đầu	<i>Melia azedarach</i> L., 1753 Meliaceae	Increased use for in-door facilities the last 5 years.

# “After SDM and the follow-up”

- SDM project (2016): restored 08 local native tree species with more than 20,000 seedlings production.
- After SDM (2016-2018):
  - Number of people continuing benefitted from field seminars and accessed to seedlings is up to 500 people.
  - Local communities and stakeholders whom have been raised awareness on importance of local trees for species conservation and ecosystem restoration is up to 3000 people.
  - Documentation has continued widely distributed to stakeholders in Vietnam and Lao PDR.
  - Number of local trees planting after SDM is about 30,617 trees (recently updated 32,901) on a total area of 38 hectares covering 03 local communities and 12 direct smallholders throughout 05 provinces in Vietnam and Lao PDR.

# Number of trees planned versus actual planting

Smallholders and community projects	Area (ha)	Planned planting	Actual planting	Number of local indigenous species	Survival rate	Progress
HEPA and smallholders farms	5	2,500	5,568	5	60-70%	Done
Smallholders Simacai district	5	2,500	9,542	5	50-60%	on 3rd year
Violak community	8	14,000	5,857	8	40-70%	on 2nd year
Smallholders Nam Bac district	5	5,000	4,400	5	50-90%	on 2nd year
Lóng Lăn community	10	10,000	5,334	3	70%	on 2nd year
Smallholders Lien Trach commune	5	5,000	2,200	4	70-75%	on 1st year
<i>Updating by 2018</i>	<b>38</b>	<b>39,000</b>	<b>32,901</b>			

# Restoration of tree species & local genetic diversity Violak community, Po E commune (2016-2018)



Tree species	Amount
Cây nhội	3000
Cây men	1000
Cây lim xanh	2000
Cây giổi mỡ	6000
Cây xoan rừng	1000
Cây chôm chôm rừng	400
Cây sơn nghệ	200
Cây mít	100
Update May 2018	

Xử lý hạt và cấy hạt vào bầu



# Restoration of tree species & local genetic diversity – Vi Po E 2 village (2018-2020)

Tree species	Amount
Cây ràng ràng	200
Cây cà phê	500
Cây bời lời	600
Cây mít dai	20
Cây cam	20
Cây ổi	
Cây sung	
Update September 2018	



# Restoration of tree species & local genetic diversity – Lien Trach commune 2 (2018-2020)

Table 2: List of native species proposed to be planted

List	Local name	Latin name	Quantity to be mixed planted
1	Giôi xanh	<i>Michelia tonkinensis</i> A. Chev., 1918 Magnoliaceae	1000
2	Lát hoa	<i>Chukrasia tabularis</i> M.Roem. 1830 Meliaceae	1000
3	Huê	<i>Dalbergia tonkinensis</i> Prain, 1901 Fabaceae	1000
4	Gáo	<i>Neolamareka cadamba</i> (Roxb.) Bosser, 1984 Rubiaceae	1000
5	Huỳnh	<i>Tarrietia javanica</i> Blume. Malvaceae	1000

3



# Restoration of tree species & local genetic diversity – Sin Chai village, Ban Me commune (2018-2020)

Table 1: List of 11 native species proposed to be planted

11	Local name	Latin name	Note
<b>I Fast growing species</b>			
1.1	Xoan ta	<i>Melia azedarach</i> L., 1753 Meliaceae	
1.2	Xoan đào	<i>Prunus aborea</i> (Blume) Kalkm., 1965 Rosaceae	
<b>II Medium and slow growing species</b>			
2.1	Lát hoa	<i>Chukrasia tabularis</i> M.Roem. 1830 Meliaceae	
2.2	Vàng tâm	<i>Manglietia dandy</i> (Gagnep) Dandy in S. Nilsson, 1974 Magnoliaceae	
2.3	Nghiên	<i>Excentrodendron tonkinense</i> Tiliaceae	
2.4	Đình thối	<i>Fernandoa brilletii</i> (P.Dop) Steenis, 1976 Bignoniaceae	
2.5	Săng		
2.6	Trò chi	<i>Parashorea chinensis</i> Wang Hsie Dipterocarpaceae	
<b>III Native fruits, spice species</b>			



# Trees planting at Simacai region



# Trees planting at Simacai region



# Restoration of trees species and trees planting at Nam Bac region (2016-2018)

Tree species	Amount
Cây may đu	800
Cây may som phat	100
Cây may kha	600
Update June 2018	



# Restoration of tree species and planting seedlings in Long Lan community (2016-2018)

Tree species	Amount
Cây may kha	1680
Cây may đu	650
White Dok Khe	417
Red Dok Khe	484
White Dok Khun	856
Red Dok Khun	167
May Du Lai	150
Sweet bamboo	55
Mak Phay	35
Mak Man	53
Mak Leng	600
Update May 2018	



# SDM from knowledge to planting (July 2018) urban groups Southern provinces



# Contributions to the Aichi Biodiversity Target

## (12) The conservation status of those species most in decline has been improved and sustained

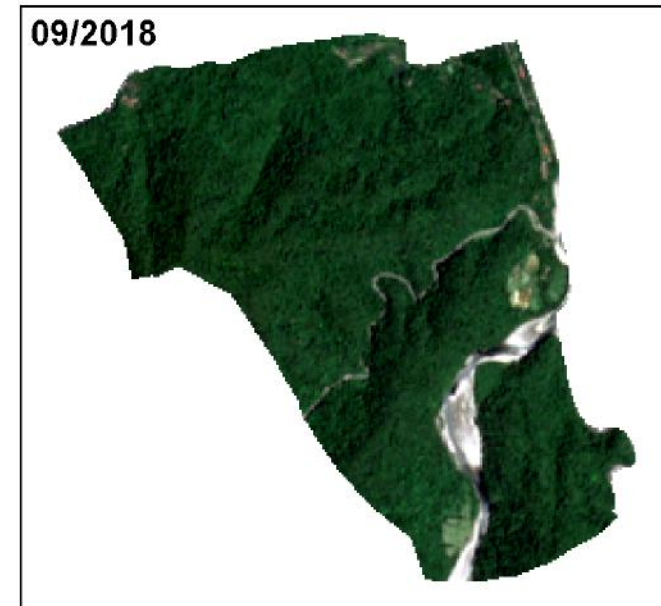
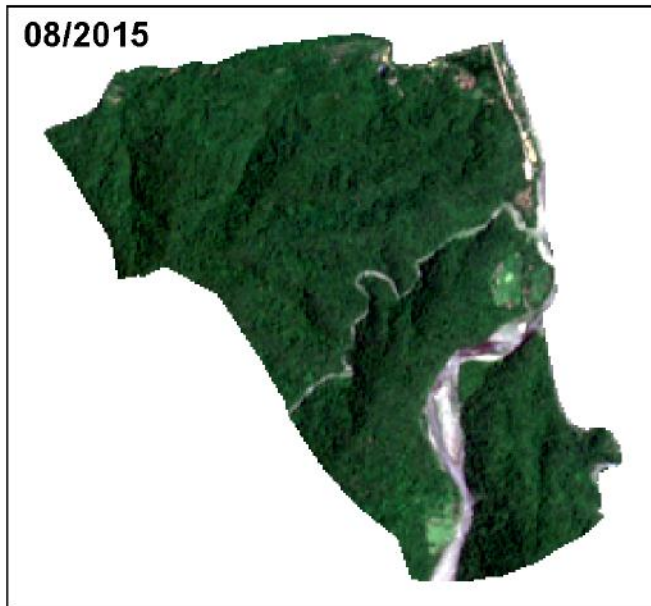
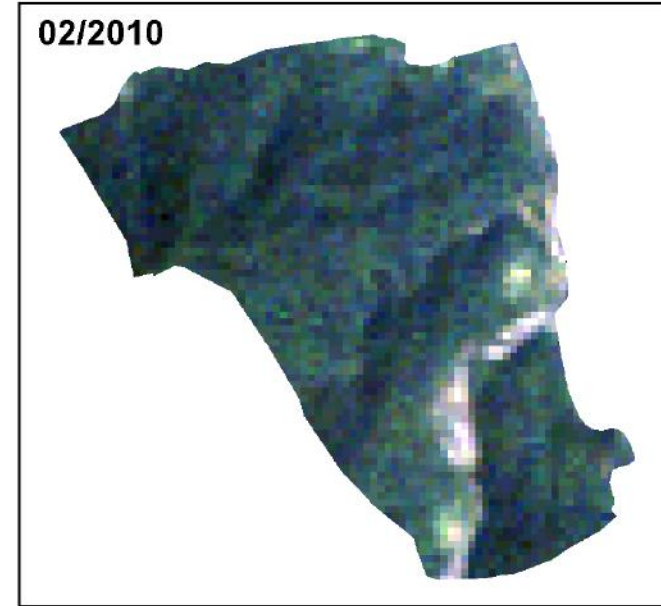
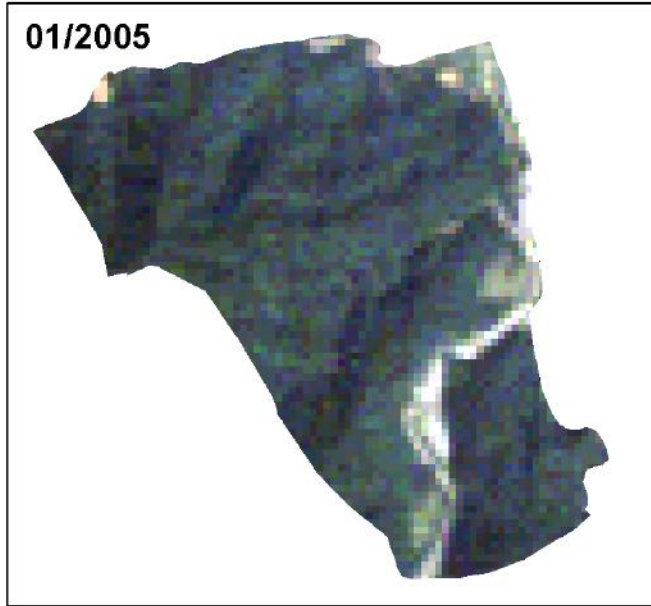
12	Indicator 1: Number of local tree species restored and planted	
	Indicator 2: Hectares planted and revitalized with those species	
	Indicator 3: Number of people access to conservation practical knowledge and seedlings for planting	
	BY (2016)	FROM (2016-2018)
	13 local species/2,379 trees	13 local species/30,617 trees planting <b>32,901 trees planting</b>
05 hectares	38 hectares	
50-100 people	03 local communities and 12 direct smallholders (families)	
01 site in 01 province Vietnam	07 sites in 05 provinces Vietnam and Lao PDR	

# Contributions to the Aichi Biodiversity Target

## (13) Strategies have been developed and implemented for minimizing genetic erosion and safeguarding genetic diversity

13	Indicator 1: A baseline data measurement and system is needed where local and global communities can measure changes Indicator 2: Proposals on traditional seeds restoration.	
	BY (2018)	AFTER (2020)
We have nothing here at this stage for baseline data management system  Can proposal and or cooperation towards baseline data management system e.g. local seeds registry system for genetic diversity be set up and supportive?		Can we set up a baseline data management system? Can we set up a local seeds registry system for genetic diversity locally? Can we engage with satellite companies to provide real images of restoration efforts?
Can proposal on continuing restoration of genetic diversity through traditional seeds restoration be supported?		

# FFS-HEPA site Landsat and Sentinel 2 images





# Acknowledgements

- Our kindest thanks extending to all local communities and CSO groups, indigenous youths and women and kids for engaging into the project; and in those sites across Vietnam, Lao PDR.
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