Overview of commitments at COP26 related to the agricultural sector and policies and plans for implementation

Le Hoang Anh
Dr. Tran Dai Nghia
Members of the Expert group in support to COP26 implementation taskforce
Ministry of Agriculture and Rural Development

Viet Nam's NDC and new commitments at COP 26 related to AFOLU sector

Sector	Contribution with domestic resources		Contribution with international support		Total contribution with both domestic resources and international support	
	Compared to BAU scenario (%)	Reduction amount (Mil. tonnes of CO_{2eq})	Compared to BAU scenario (%)	Reduction amount (Mil. tonnes of CO_{2eq})	Compared to BAU scenario (%)	Reduction amount (Mil. tonnes of CO_{2eq})
Energy	5.5	51.5	11.2	104.3	16.7	155.8
Agriculture	0.7	6.8	2.8	25.8	3.5	32.6
LULUCF*	1.0	9.3	1.3	11.9	2.3	21.2
Waste	1.0	9.1	2.6	24.0	3.6	33.1
IP	0.8	7.2	0.1	0.8	0.9	8.0
Total	**9.0**	**83.9**	**18.0**	**166.8**	**27.0**	**250.8**

Note (*): increase in GHGs sequestration

- Net zero emission by 2050
- Glasgow Forest and Land Use Declaration
- Ecological Transformation of Agro-food System

By 2030

- Methance cut of 30% compared to 2020 (GMP)
- Growth rate of GAPV 2.5-3%/yr
- Ag Labor productivity 5.5-6%/yr
- Income in Ag sector: 2.5-3 times compared to 2020
- Export value growth:5-6%/yr
- Multi-dimensional poverty HH reduced 1-1.5%/yr (10.83 và 5.77 at 1/2022)
- Timber harvested: 50 mill. m3

2. Reduce global methane emissions

approved by 103 countries

- Commitment to collectively reduce global methane emissions by at least 30% below 2020 levels by 2030
- Reduce methane emission through improving the production procedure and applying technology
- Apply the methane emission inventory to the highest tier of IPCC inventory methodologies and to improve the transparency, accuracy and comparability of inventory reporting
- Develop and implement the action plan for methane emission reduction by 2030 (Decision 942/QD-Ttg dated 5/8/2022)

3. Glasgow Leaders' Declaration on Forests and Land Use

signed by 141 countries, including Vietnam

To halt and reverse forest loss and land degradation by 2030 while delivering sustainable development and promoting an inclusive rural transformation.

Conserve forests and other terrestrial ecosystems and accelerate their restoration

Facilitate trade and development policies, that promote sustainable development, and that do not drive deforestation and land degradation;

Reduce vulnerability, build resilience and enhance rural livelihoods

Implement and redesign agricultural policies and programmes to incentivise sustainable agriculture, promote food security, and benefit the environment

Reaffirm financial commitments and significantly increase finance and investment, while also improving its effectiveness and accessibility, to enable sustainable agriculture, sustainable forest management, forest conservation and restoration, and support for local communities

Facilitate the alignment of financial flows with goals to reverse forest loss and degradation, while ensuring robust policies and systems to advances forest, sustainable land use, biodiversity and climate goals

4. *Policy action agenda for transition to sustainable food and agriculture*

17 countries participated

- **Sustainable agriculture**
- Supports the generation of better economic livelihoods and incomes for farmers
- Eliminate the negative impact on environment and natural resource base
- Uses inputs and resources efficiently
- Includes overall benefits for ecosystem integrity
- Promotes agricultural practices that sequester or minimize GHG emissions
- Protect air and water from pollution

Related policies

- National Green Growth Strategy (Decision 1658/2021), Action Plan on National Green Growth (882/QD-TTg -07/2022), Agriculture Sector Plan to implement National Green Growth Strategy (3444/QD-BNN-KH/9-2022)
- National Strategy in Response to Climate Change to 2050 (896 / QD-TTg - 7/2022)
- Strategy for Sustainable Agriculture and Rural Development (Dec.150/QD-TTG, 2022)
- Target programs: Agricultural economic restructuring and disaster prevention; Strategies for livestock, fisheries, forestry and natural disaster prevention
- Implementation of the Paris Agreement (Decision 2053/QD-TTg 2016); Dec. No. 891/QD-BNN-KHCN (2020)
- National Adaptation Plan (1055 QD/TTG, 156/BNN-KHCN. 2021)
- Vietnam's NDC (2020)-newly updated
- Decree 06/2022 (GHG reduction action plan and CH4) – GHG emission reduction plan and environment for agriculture and rural development to 2030, vision to 2050 (under completion)
- Other action plans (converting the chain of sustainable agricultural products, forests and land use, ..)

Decree 06/2022/ND-CP regulations on reduction of greenhouse gas emissions and protection of the ozone layer

Ministry in charge	Sector	Minimum emission reduction target to 2030 (Mt CO2eq)
MOIT	- Energy production - Energy consumption in manufacturing sector	268,5
Ministry of Transportation	- Energy consumption in transportation sector	37,5
MARD	- Energy consumption in agricultural sector - Agricultural production - Forestry	129,8
Ministry of Construction	- Energy consumption in cement production - Industrial processes - Commercial buildings	74,3
MONRE	- Waste treatment	53,7

Action Plan for Methane Emissions Reduction by 2030

The objective is utilise national efforts to reduce overall methane emissions from cultivation, animal husbandry, solid waste management, wastewater treatment, oil and gas extraction, coal mining and fossil fuel consumption, by at least 30% below 2020 level by 2030.

Tasks and solutions are:

- Make investment in small-scale and inter-field irrigation works or facilities that are advanced, modern, synchronous for specialised rice production zone; apply active water draining during the crop time; apply water-saving irrigation system that suits each eco-region.

- Widely adopt rice – shrimp farming model and convert from flooded rice paddy to upland crops with higher economic efficiency in conformity with specific conditions of each province; adjust crop structure, farming seasons, processes and techniques in order to improve economic efficiency and reduce methane emissions.

- Terminate burning of agricultural waste and by-products by means of innovation and development in a large scale processes and technologies for collection, classification, treatment, recycling, circulating and repurposing of agricultural waste and by-products in order to enhance economic values, convert from carbon stored in plant biomass to sustainable carbon and clean energy, and increase soil-based carbon sequestration and thus reduce methane emissions.

- Change, improve and use appropriate preparations in food serving sizes in order to increase productivity and economic values in livestock breeding and reduce methane emissions; carry out crossbreeding and improve domestic livestock breeds using foreign high-yielding breeds in order to improve productivity and efficiency in animal husbandry; effectively develop biogas model and apply technologies to production of organic fertilizers using waste from animal husbandry; recover and use methane emissions generated from breeding waste treatment for livestock breeding and electricity generation.

SECTOR MITIGATION TARGETS

By 2030, achieving a net emission reduction of 129.8 million Mt CO2eq; methane emission will not exceed 45.9 million Mt CO2e (30.9 MtCO2eq in crops and 15.2 Mt CO2e in livestock production);
Contribute to the country's net zero emissions by 2050, while ensuring sustainable development and growth, reducing environmental pollution, improving efficiency, added value and competitiveness of the agricultural sector

Targets and mitigation roadmap

Arrive 2025

Agriculture :

- To reduce emission by 14.35 % compared to BAU (15,67Mt) of which 12.17 Mt CO2e from crop production and 3.49 Mt CO2e from LP
- Methane emissions : does not exceeds 42.2 Mt CO2e in Crop and 16.8 Mt CO2e in Livestock

FLU: GHG reduction of 27.7 MtCO2e (net emissions - 65.6 MtCO2e)

Arrive 2030

Agriculture:

To reduce emission by 31 % compared to BAU (34.74 MtCO2e) of which 28.27 MtCO2e from crop production and 6.47 Mt CO2e from LP

- Methane emissions : does not exceeds 30.7 Mt CO2e in Crop and 15.2 Mt CO2e in Livestock

FLU: GHG reduction of 84.5 MtCO2e (net emissions - 95.3 MtCO2e)

Arrive 2050

Agriculture:

- Total reduction of 58 MtCO2e of which 44.96 Mt CO2e from crop production and 13.04 Mt CO2e from Livestock
- Total GHG of the sector will not exceed 56 Mt CO2e

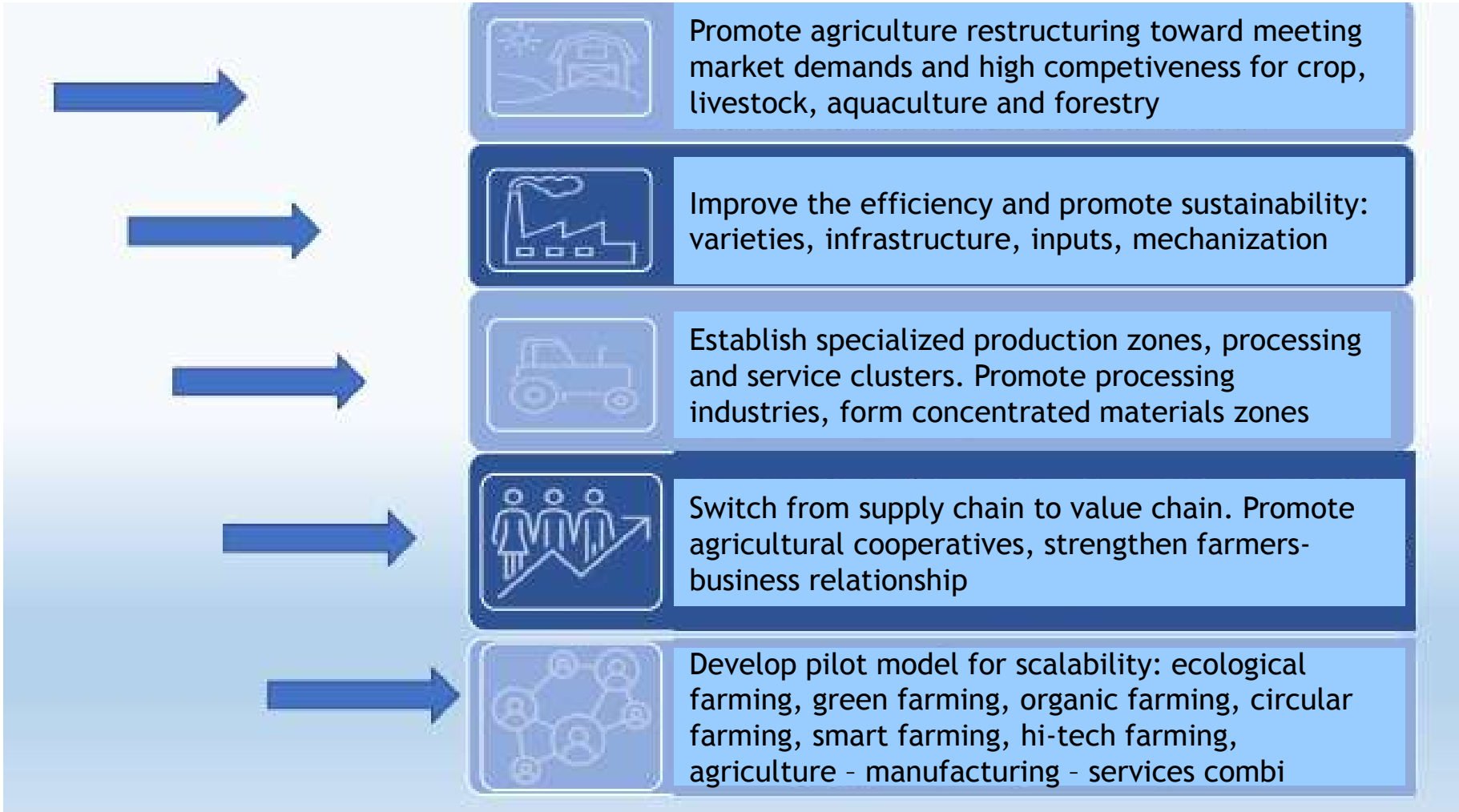
FLU: GHG reduction of 125 MtCO2e (net emissions - 185.2 MtCO2e)

Develop an action plan for “Glasgow Leaders' Declaration on Forests and Land Use”

- An action plan for ‘Glasgow Leaders' Declaration on Forests and Land Use for the period 2022-2030’ is under preparation and to be submitted for approval by 12/2022;
- Objective:
- Up to 2030, basically reverse deforestation and forest land degradation; effectively control forest conversion; harmonize economic and environmental goals
- Up to 2030, strive to improve quality of 50% of degraded forests; improve productivity, economic efficiency and sustainability of plantations
- Perfecting institutions and policies in the direction of breakthroughs for sustainable production without causing deforestation or land degradation; improve resilience, reduce vulnerability to climate change …
- Mission: 6 main missions (slide 4)

Policy action agenda for transition to sustainable food and agriculture

1. Transforming the food system through enabling ecological farming, promoting commercial production with high-value, meeting domestic and international market demands, applying modern processing and treatment technology, becoming the top exporters for many commodities.



Policy action agenda for transition to sustainable food and agriculture

2. **Develop the national action plan for transition to sustainable, responsible and transparent food system in Vietnam for the period 2022-2030**

3. **Identify and implement the actions to direct private investment and partnership toward sustainable food and agriculture, including:**
   - Consolidate the views of public and private actors to identify the enabling conditions that promote the financing towards sustainable agriculture and food systems;
   - Identify suitable public-private partnership mechanism that reduce the risk of investments in sustainable food and agriculture
   - Conduct discussions to translate ideas into action and different mechanisms to facilitate the transition: e.g. Co-investment

Decision 01/2022/QD-TTg promulgating the list of sectors, greenhouse gas-emitting establishments subject to greenhouse gas inventory

link: https://vanban.chinhphu.vn/?pageid=27160&docid=205181&classid=1

Sectors subject to greenhouse gas inventory
energy
transportation
Construction
Industrial processes
Agriculture, Forestry and land use
Waste

6 sectors

Establishment subject to mandatory inventory of greenhouse gases
Factories with annual emission level ≥ 3.000 Mt CO2eq
Industrial factory, thermal power plants with total annual energy consumption ≥ 1.000 ton of oil equivalent (TOE)
Transport companies with total annual energy consumption ≥ 1.000 TOE
Department and commercial building with total annual energy consumption ≥ 1.000 TOE
Hard waste treatment factories with annual operating capacity ≥ 65,000 tons

1912 units

Establish and develop the carbon market

Law 72/2020/QH14 on Environmental Protection 2020 was enacted during 10th meeting by the National Assembly of Vietnam XIV. Effective from 01/01/2022

Article 139. Organizing and developing domestic carbon market:

The domestic carbon market covers the **exchange of GHG emission quotas and carbon credits** obtained from the participation in domestic and international carbon credit exchange and offsetting mechanisms in accordance with regulations of law and international treaties to which the Socialist Republic of Vietnam is a signatory.

Emission allowance

Goals of emission reduction at national and sector level

Emission cap

Emission inventory results

- Issue the allowance for emissions per unit of product for each type of business
- Assign emission allowance for business units for the period 2026-2030 and annually

Carbon Pricing

Carbon pricing curbs greenhouse gas emissions by placing a fee on emitting and/or offering an incentive for emitting less (definition by UNFCCC)

Tools for carbon pricing

HỆ THỐNG TRAO ĐỔI HẠN NGẠCH

Carbon credit

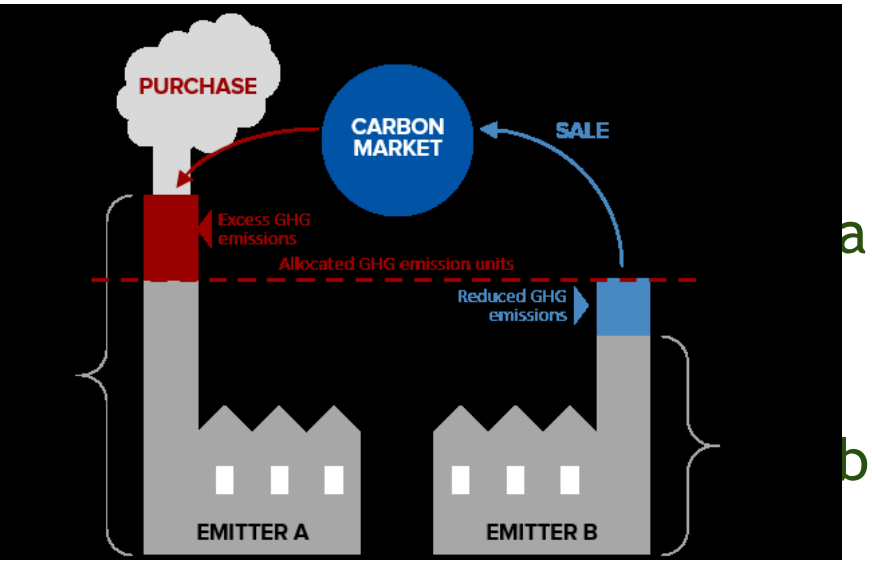
Carbon credit trading mechanism (carbon credit)

Degree 06/2022/NĐ-CP (Point 5, Article 3)

"carbon credit exchanging and offsetting mechanism" means mechanisms of registration and development of programs and projects on mitigation of GHG emissions and generation of carbon credits by methods certified by Vietnam or international countries.

The carbon credits from these programs and projects are exchanged on the carbon markets or offset against GHG emissions exceeding GHG emission quotas allocated.

Emission allowance and carbon credit trading in the domestic carbon market



Emission allowance is the limit on emissions that a country, firm, individual is allow to emit in certain period of time. The unit for emission allowance is ton of CO2

a) Firms can auction to receive additional emission allowance to their assigned allowance within the committed period
b) Firms can transfer their spare allowances to the future year within the committed period
c) Firms can borrow the allowances in future year within the committed period;
d) Firms can use the carbon credit from projects under credit exchange mechanism, to offset their greenhouse gas emissions within the committed period (max 10%)

Thank you

Contact: lehoanganh06@gmail.com

Good food, Good life

Welcome to Nescafe Plan Viet Nam Regenerative Agriculture

Oct 20th, 2022

Ngoc, Pham Phu

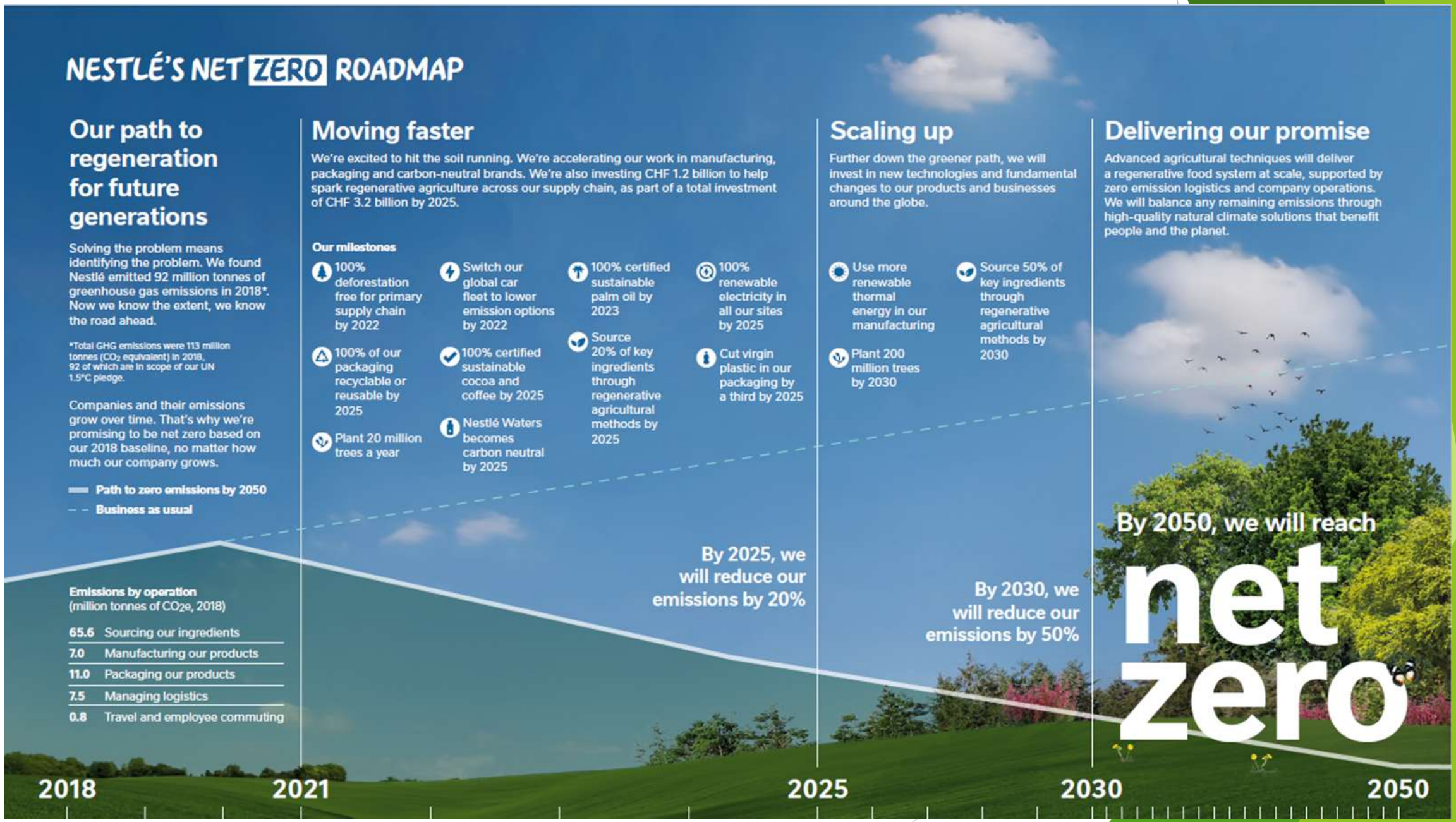
Agricultural Services Manager

Chief Company Representative

in the Central Highlands Regions

Nestlé Vietnam

NESTLÉ COMMITS TO NET ZERO BY 2050



NESTLÉ'S NET ZERO ROADMAP

BY 2025, we will reduce our emission by 20%

BY 2030, we will reduce our emission by 50%

BY 2050, we will reach NET ZERO

Product emissions from farm to fork

UPSTREAM — Suppliers to Nestlé → Nestlé operations → DOWNSTREAM — Customers, consumers and end of life

Agriculture
Sourcing high-quality ingredients from suppliers, co-operatives and direct from farmers.

Raw material suppliers
Sourcing materials and ingredients and transporting them to Nestlé.

Manufacturing
Making products.

Packaging
Packaging our manufactured products.

Logistics
Storing and delivering our products around the world.

Retail and business channels
Offering and selling products to shoppers in stores.

Consumers
Our consumers enjoying Nestlé's products wherever they are.

End of life
For products and packaging.

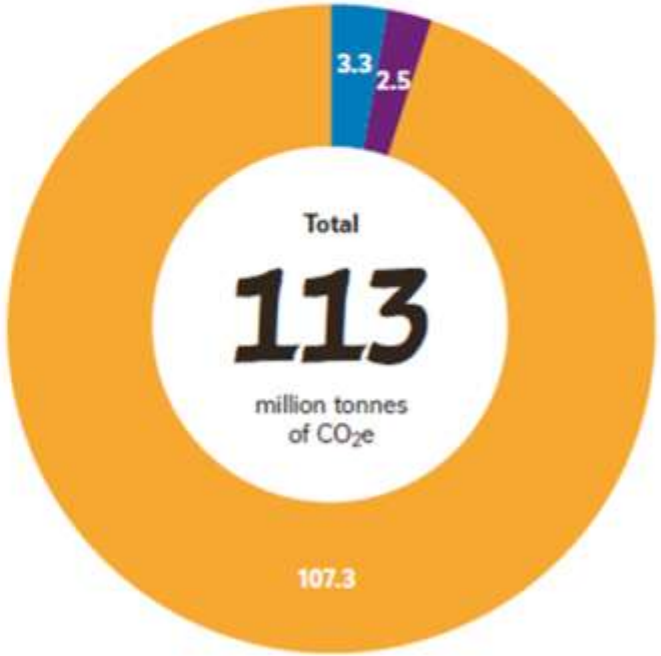
OUR FOCUS ACTIONS BY 2025

Nestlé's total GHG emissions by Scope

million tonnes of CO_2e, in 2018

Scope 1		
Emitted directly	**3.3**	**3.0%**
from sources we own or control such as on-site combustion (coal, natural gas, fuel for company's vehicle fleet).		
Scope 2		
Emitted indirectly	**2.5**	**2.2%**
from the generation of purchased energy like electricity and heating/cooling network.		
Scope 3		
All other indirect emissions	**107.3**	**94.8%**
in our value chain, both upstream and downstream, such as sourcing and use of sold products.		

Figures have been rounded.



Renewable energy & logistic

- **Low emission** car fleet
- **100%** Renewable electricity at all sites

Sustainable sourcing

- **100%** certificated sustainable ingredients
- **20%** ingredients from **regenerative agriculture**

Sustainable packaging

- **100%** of our packaging are recyclable or reusable
- Reduce our use of virgin plastics by **1/3**

Caring water

- **AWS** Certification
- Net Positive Water Impact
- Water savings in operation

REGENERATIVE AGRICULTURETHE HOLISTIC MODEL

We are guided by agroecological principles and practices

Diverse cropping systems & livestock integration

Collective & landscape actions

Farmer

Soil health

Biodiversity

Water security & quality

AIN REGENERATIVE AGRICULTURAL PRACTICES

1. Cover crops [I]
2. Diversified crop rotation [I]
3. Mulching & crop residues cover [I]
4. Minimum tillage [I]
5. Organic fertilizers [I]
6. Irrigation technology [II]
7. Riparian buffers [III]
8. Integrated nutrient management [I]
9. Intercropping [III]
10. Agroforestry & silvo-pastoral systems [III]
11. Hedgerows, green buffers [III]
12. Integrated pest management & bio-controls [III]
13. Precision farming [I]
14. Manure storage & process [I]
15. Herd management [III]
16. Integrated pasture management & grazing strategies [III]
17. Landscape-scale collaboration [I]II

IL CONSERVATION & SOIL HEALTH

According to the FAO in 2017 "… soils have become one of the most vulnerable resources in the world. Soils are a major carbon reservoir …

Depending on their condition, soils act as carbon sinks or net carbon emitters. Soil management practices can play a major role in affecting the dynamics of the flow of these gases

- Without healthy soil we would not be able to grow our food. In fact, it is estimated that 95% of our food is directly or indirectly produced on our soils.
- Soil is a fundamental asset. Soil health and fertility must be protected and restored.
- Soil organic matter is an important measure of soil fertility. Unfortunately, there is extensive evidence showing it is declining, even in the world's most fertile agricultural landscapes.
- Change of land use and continued use of conventional farming practices are some of the main drivers of the loss of soil organic matter.
- Soil erosion is a growing concern too: soil erosion from agricultural fields is estimated to be currently 10 to 20 times (no tillage) to more than 100 times (conventional tillage) higher than the soil formation rate. Some studies suggest that in 60 years the arable fertile layer may be exhausted.
- In addition to the above, soils play a key role in global climate processes, through the emission of three major GHGs: carbon dioxide (CO_2), nitrous oxide (N_2O), and methane (CH_4)

ATER AND WATER CONSERVATION

Water saving irrigation is mandatory for any crop, especially for the most consuming crops i.e., wet rice, coffee. Integrated water and biodiversity need to be in place for both water and soil conservation and improve biodiversity

- Water is an essential resource. Without water, plants cannot grow and ensure food security.
- Water is a renewable resource, but two crucial challenges must be addressed to manage it correctly: the use/replenish balance; and where and when water is made available.
- Since 1961 the use of irrigation has doubled and now, around 20 % of total crop land is irrigated. Agriculture accounts for approximately 70 % of global freshwater use increasing to 90% in some developing countries. Some 1.2 billion people live in areas where severe water shortages and scarcity create challenges for agriculture, with very high drought frequency for rainfed crops and pasture areas or very high-water stress experienced in irrigated areas.
- In addition to water scarcity, the other main management challenge is the impact of agriculture on water quality. Overuse of fertilizers, poor manure management and unregulated run-off can lead to local contamination of aquifers and river streams and eutrophication.

ODIVERSITY

"Nature and its vital contributions to people, which together embody biodiversity and ecosystem functions and services, are deteriorating worldwide."

- "Resilience to extreme weather events is also linked to on-farm biodiversity, a typical feature of traditional farming systems".
- Ecosystem services are critical to humanity and affect all aspects of people's lives, including food and medicines. 70% of the drugs used to treat cancer are either naturally derived or built from synthetic substances based on natural equivalents.
- In theory, over 7000 edible species can be used for food, but only 150-200 are commercially cultivated. Four plant species provide 50% of the world's energy needs. Food production systems have been oversimplified to increase their productivity, but now there is a need to diversify them in order to increase efficiency and resilience.
- The use of pesticides / herbicides and the use of highly productive varieties has contributed to tremendous increases in yields, (x 3 since 1960), providing food to an expanding global population. Their overuse has, however, also contributed to the deterioration of ecosystems.
- Loss of genetic diversity reduces the natural resilience of production systems to attacks by pests and plant diseases, threatening global food security
- We require a radical change of practices and new innovations aiming to reverse this trend and help protect crops and animals and maintain and increase food production

REGENERATIVE AGRICULTURE

What have happened under Nescafé Plan Vietnam?

BEFORE NESCAFÉ PLAN

TRUST ?

VIETNAM

Sustainable ?

Farmer organization?

Coffee aging?

Poor practices?

Poor practices?

Drought

Water shortage ?

Green cherries picking habit?

Semi hulling?

Poor GC

Income?

Problems

GAP/ NBFP

VIETNAM

>600k	1.6 mio	500k	1 Mio	3.4 bio
Ha of coffee	Metric tons	Coffee Farmers	Job creation	USD turn-over

WELCOME TO NESCAFÉ PLAN VIETNAM

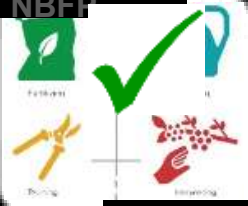
Solutions

4C Farmer

Sustainable NCP

Plantlet

GAP/ NBFP



Best practices

Compost fertilizers

Saving Watering

Appropriated Intercropping

Ripen cherries picking habit

Better GC quality

> Income

Ethnic + Women Empowerment

RESOURCES

THE NESCAFÉ PLAN VIETNAM

NESTLE supporters

- GC Zone AOA
- R&D Tours
- TM Team
- HR /CA/ RA
- Nescafe Team
- Sale Team
- Farmer Group Leaders

NESCAFÉ FARMS

TUONG.NGUYEN
AGRONOMIST LEADER
DAK NONG PROVINCE

NGOC. PHAM
ASD MANAGER

THONG.NGUYEN
AGRONOMIST LEADER
LAM DONG PROVINCE

HONG.TRAN
AGRONOMIST LEADER
DAK LAK PROVINCE

VUONG.LE
AGRONOMIST LEADER
GIA LAI PROVINCE

PLANTLETS distributed

NGA.NGUYEN
PLANTLETS MANAGEMENT

THUAN.NGUYEN
AGRONOMIST LEADER
GIA LAI PROVINCE

HIEN.PHAM
QUALITY TRAINER/ADM

8	21K	274	34K	150K
Agronomists	Farmers household	Farmer Group Leaders	Ha coffee area	Metric tons

Partners

- IDH the sustainable trade initiative
- GLOBAL COFFEE PLATFORM
- 4C ASSOCIATION
- ILO
- GrowAsia
- VCCB
- cirad
- MARD NAEC
- WASI

Our values are rooted in respect

Nestlé Creating Shared Value

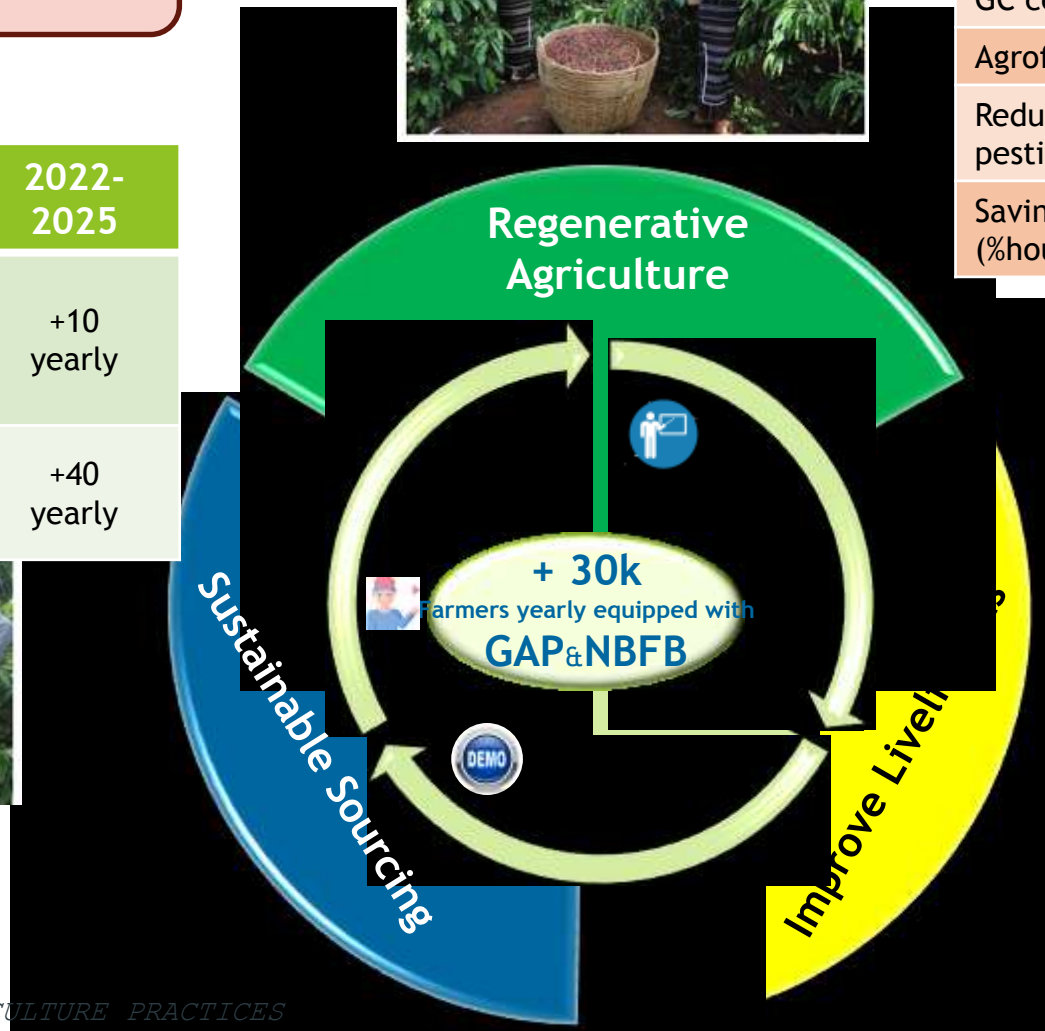
PROGRESSIVE NESCAFE PLAN FARMER CONNECT YEAR ON YEAR

D3

1.8 mio
ktons

20%
Buy total GC of VN

	2011-2021	2022-2025
Distribution of high-yielding plantlets (mio tree)	53	+10 yearly
Sustainably sourced supply to TRIAN (ktons/year)	550	+40 yearly



	2011-2021	2022-2025
Regenerative Agriculture (quantity of GC certified by Reg Agri) (kton)	4 (in 2021)	+14 yearly
Agroforestry, intercrops rate (%)	65%	75%
Reduce 20% Chemical fertilizers & pesticides (%household apply)	65%	80%
Saving 40% water for irrigation (%household apply)	65%	80%

	2011-2021	2022-2025
Diversified and increased farm income %	30%-100%	35%-150%
Sustain coffee productivity tons/ha (Max 5 tons/ha)	3.5 - 4	4 - 5

GAP: GOOD AGRICULTURE PRACTICES
NBFP: NESCAFE BETTER FARMING PRACTICES

etnam: Nescafé Plan

- Beneficiaries > 21,000+ 4C certified farmer households and more than 15,000 farmers/year in the Central Highlands Provinces via plantlet distribution (2011-2021)
- Activities;
  - 330,000+ training sessions on sustainable coffee cultivation
  - 63.5 Mio rust leaf tolerant and high yielding coffee plantlets distributed in collaboration with WASI as of Aug 2021
  - Embarking in regenerative agriculture through promotion of proper intercropping models, integrated weed management, reducing 40% water consumption in irrigation and optimizing 20% fertilizers usage by introducing compost fertilizer making from coffee husk & residue.

Impact > Annual M&E Assessments done through Rainforest Alliance

- 63,000+ Ha of coffee land renovated with improved material
- Farm productivity increased to a signification higher level than the country average (av of 3.2 MT GC/ha vs 2.8 MT/ha)
- 20% decrease in Production Cost
- 40%-60% irrigation water saving & 20% of synthetic fertilizers reduction

SHIFT OF CROPPING PATTERN

THE NESCAFÉ PLAN

MONOCULTURE

Intercrops

CROP BIODIVERSITY

FARMER PROFILE

Background information:

- Name: **Y Hung Bya**, son of Y Ty Bya
- Age: 26 (1996)
- Address: Pu Hue Village, Ea Ktur Commune, Dak Lak Province

Total area: 1.7 ha (rejuvenated 800 trees), intercrops with black pepper 500 trees, he keeps 3 rows of coffee and intercrops with two rows of black pepper. Yield: 4.2 tons coffee and 2.5 tons black pepper from last season (2021-2022)

Y Hung has been taken over the coffee farm of his farther (Y Ty) since 2015 after rejuvenated. He has 2 year in Israel as worker for Thai company, then back home to support her farmers on coffee production.

His family has joined Nescafe Plan since 2014 and rejuvenated his aging coffee plantation since 2015.

The farm has fully engaged to Regenerative Agriculture interventions, by apply appropriated intercropping model by mulching application from residues (branches, weeds after pruning, etc.,) and reduced 40% water for irrigation, no pesticides and herbicides used at all.

All activities have been fully recorded on digital FFB for CO_2 & production cost calculation, this will support his family to decide when to sell their coffee and black pepper at the best profitable period and improve farms' income.

FARMER PROFILE

Name: **Y Hung Bya**,

Son of Y Ty Bya

Age: 26 (1996)

Address: Pu Hue Village, Ea Ktur Commune, Dak Lak Province

COFFEE FARMS' INCOME CALCULATION

Farmer Name: Y Ty Bya	**Total**	**Rejuvenated**	**Remains**
Area (Ha): 1.7	**1.7**	**0.50**	**1.20**
Production (MT): 5	**5**	**2.50**	**2.50**
Int' rate (1 USD~VND)	24,000		

No	Name of crop	2019 - 2020 Crop Season			2020 - 2021 Crop Season			2021 - 2022 Crop Season		
		Production (kg)	Selling Price (VND)	Total Cost (VND)	Production (kg)	Selling Price (VND)	Total Cost (VND)	Production (kg)	Selling Price (VND)	Total Cost (VND)
1	Coffee	3,000	35,900	107,700,000	3,300	37,000	122,100,000	4,200	42,500	178,500,000
2	Black Pepper (intercops)	2,500	40,000	100,000,000	3,000	56,000	168,000,000	2,500	77,000	192,500,000

No	Name of crop	2019 - 2020 Crop Season			2020 - 2021 Crop Season			2021 - 2022 Crop Season		
		Gross Venue	Total expenditures	Profit	Gross Venue	Total expenditures	Profit	Gross Venue	Total expenditures	Profit
1	Coffee	107,700,000	82,000,000	25,700,000	122,100,000	79,670,000	42,430,000	178,500,000	86,920,000	**91,580,000**
2	Black Pepper (intercops)	100,000,000	38,000,000	62,000,000	168,000,000	53,000,000	115,000,000	192,500,000	35,400	**192,464,600**
	Total income (VND)	**207,700,000**	**120,000,000**	**87,700,000**	**290,100,000**	**132,670,000**	**157,430,000**	**371,000,000**	**86,955,400**	**284,044,600**
	Total income (USD)	**8,654**	**5,000**	**3,654**	**12,088**	**5,528**	**6,560**	**15,458**	**3,623**	**11,835**

FARMER PROFILE

Background information:

- General information of Dak Lak Province

Criteria	2021
Average income/ ha	165,741,411
Cost/ 1ha	59,705,017
Gross income/ 1ha	119,089,201
Net profit/ 1 ha (VND)	59,384,184
Net profit/ 1 ha (USD)	2,593
Income increased vs 2011 %	103
Income increased/ year	2.81
Total income increased	43.77

Cultivation Method	Carbon (kg)	Kg (Co2)	CO2 emission (Kg CO2e)	CO2 gain (Kg CO2)	Average (Kg CO2)	Emission/1kg GC
Intercropping	20,723	76,053	6,012	76,053	70,041	1.43
Mono Cropping	6,993	25,664	6,012	25,664	19,652	

Excel File - Tính toán hệ số Phát thải

NESCAFÉ PLAN 2030

Renewing the world of coffee to help uplift lives and livelihoods with every cup

2030 Vision

An integrated strategy to use regenerative agriculture to help address climate change, aiming to:

- **Reduce greenhouse gas emissions**
- **Increase farmers' income**
- **Create better social conditions**

Our goals:

By 2025

- 100% responsibly sourced coffee
- Source 20% of our coffee through regenerative agricultural methods

By 2030

- Source 50% of our coffee through regenerative agricultural methods
- 50% greenhouse gas emissions reduction

Agroforestry

Help farmers to improve soil health, water management and biodiversity by combining coffee with shade or border trees

Land restoration

Support farmers to plant native trees to capture CO_2 in and around coffee farms, improving biodiversity and water management

Green borders (riparian buffers)

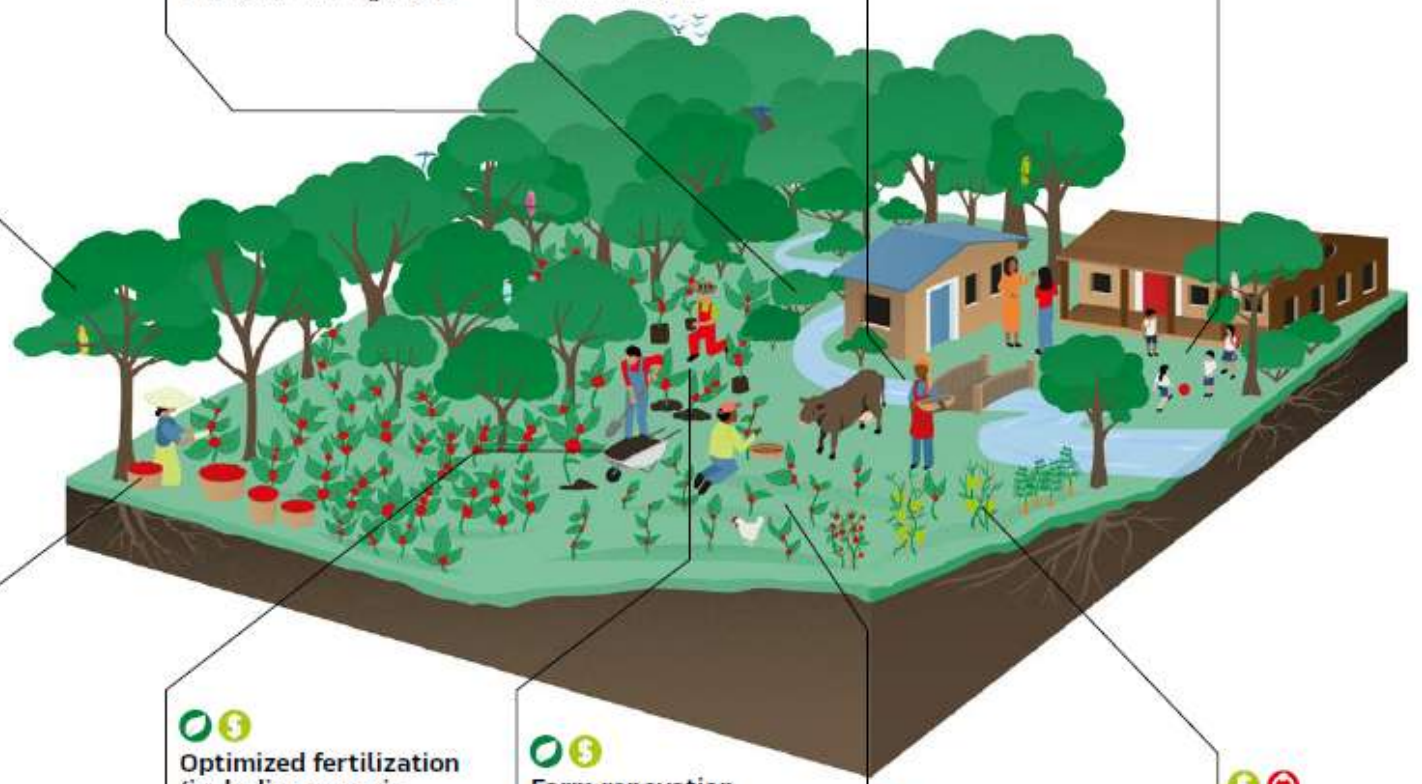
Help farmers improve water sources and biodiversity by restoring vegetation along the water margins

Financial support

Supporting coffee farmers in accelerating their transition to regenerative agriculture

Human rights and child protection

Reinforcing monitoring and corrective actions across our value chains



Women and Youth empowerment

Enhancing business and financial skills through training, including record keeping and farm management

Optimized fertilization (including organic fertilizers)

Support farmers to improve productivity and quality, reduce CO_2 and improve soil health by tailoring the fertilizer to the soil needs

Farm renovation

Support farmers to improve yield and quality, and to reduce CO_2, while aiming to improve income through pruning and/or the introduction of new improved coffee varieties

Cover crops

Help farmers to improve soil health and biodiversity, whilst reducing agrochemical usage

Income diversification (including intercropping)

Promoting different crops within the coffee farm to enhance income diversification, soil health and biodiversity


Thank You!


THE NESCAFÉ PLAN
#extrAOrdinary AWARDS
OUR WORLD, THEIR FUTURE
Thank You!
It all starts with a
NESCAFÉ