# M&E REPORT ON GROWING STATUS OF TREES AFTER 08 MONTHS - GROW FOR IT MODEL IN HOA BINH PROVINCE

#### I. General information

- Selected areas to implement the model: 06 villages of Thach Yen commune, Cao Phong district, Hoa Binh province
- 2. Total area: 25ha
- 3. Number of households participating in GFI model: 22
- 4. Species of planted seedlings: Acacia Mangium, Chukrasia tabularis
- 5. Planting time: August 2021 (Planting season 2021)
- 6. Time period to collect information for report writing: May 05<sup>th</sup> 2022.
- 7. Date of report completion: May 12<sup>nd</sup> 2022

## II. Growing status of forest of each household

NO	Farmers' name	Area (ha)	Planted time	Photos of trees after 8 months planting	Date taken	GPS point	Survival rate	Growing status
Cl	Bui Van Bien	1,1	August 2021		05/05 /2022	GPS           Latitude         20; 36; 6.38989999999452           Longitude         105; 21; 23.119899999990           Altitude         514.51713231418023	100%	<ul> <li>The height of trees ranges 1,0 – 1,4m</li> <li>The perimeter of tree stumps ranges from 5 - 6cm</li> <li>Sprouting rotations of the trees: 4</li> <li>The leaves are glossy green, roots are strong</li> <li>Trees grow well and evenly.</li> </ul>
C2	Bui Thi Nang	0,7	August 2021		05/05 /2022	GPS           Latitude         20; 36; 26.339900000062           Longitude         105; 21; 23.15000000023           Altitude         520.2174418604651	100%	<ul> <li>The height of trees ranges 0,8 – 1,2m</li> <li>The perimeter of tree stumps ranges from: 4 - 6 cm</li> <li>Sprouting rotations of the trees: 3</li> <li>The leaves are glossy green, roots are strong</li> <li>Trees grow well and evenly.</li> </ul>

C3	Quach Cong Bieu	1,7	August 2021	05/05 /2022	GPS Latitude Longitude Attitude	20; 36; 37.5399000000032 105; 21; 24.96000000020 583.14418066010421	In Dec 2021, 135 trees were destructed by of crickets which were killed by the household immediately after finding it. These dead or broken trees have been replaced by new trees. Currently, the survival rate is 100%.	<ul> <li>The height of trees ranges 0,7 – 1,1 m</li> <li>The perimeter of tree stumps ranges from: 4 – 5cm</li> <li>Sprouting rotations of the trees: 3</li> <li>Trees grow slower than other households implementing the GFI model due to nutrient-poor soil.</li> </ul>
C4	Bui Van Thich	1,5	August 2021	05/05 /2022	GPS Latitude Longitude Atitude	20; 36; 20.00000000000001 105; 21; 6.150000000231 637.73713337022684	100%	<ul> <li>The height of trees ranges 0,8 – 1,2m</li> <li>The perimeter of tree stumps ranges from 5-7cm</li> <li>Sprouting rotations of the trees: 4</li> <li>The leaves are glossy green, roots are strong</li> <li>Trees grow well and evenly.</li> </ul>

slower than households the GFI nutrient-poor trees ranges: er of tree s from: 7 –
er of tree
f

C7	Bui Van Canh	1,0	August 2021	05/05 /2022	GPS Latitude Longitude Altitude	20; 37; 26.660000000033 105; 21; 9.24989999999525 506.45467224546724	100%	<ul> <li>The height of trees ranges: 1,0 - 1,5m</li> <li>The perimeter of tree stumps ranges from: 5 - 7cm</li> <li>Sprouting rotations of the trees: 4</li> <li>The leaves are glossy green, roots are strong</li> <li>Trees grow well and evenly.</li> </ul>
C8	Bui Van Quan	1,0	August 2021	05/05 /2022	GPS Latitude Longitude Atitude	20; 38; 3.11990000000534 105; 20; 27.89000000013 328.73867403314915	In Dec 2021, 80 trees were destructed by of crickets which were killed by the household immediately after finding it. These dead or broken trees have been replaced by new trees. Currently, the survival rate is 100%.	<ul> <li>The height of trees ranges: 0,8 - 1,1m</li> <li>The perimeter of tree stumps ranges from: 3,5 - 5cm</li> <li>Sprouting rotations of the trees: 3</li> <li>Trees grow slower than other households implementing the GFI model due to nutrient-poor soil.</li> </ul>

С9	Dinh Cong Tich	1,5	August 2021	05/05 /2022	GPS           Lattude         20; 37; 57.009900000045           Longitude         105; 20; 25.659900000027           Altitude         373.22372060857538	100%	<ul> <li>The height of trees ranges: 0,8 – 1,1m</li> <li>The perimeter of tree stumps ranges from: 3,5 – 5cm</li> <li>Sprouting rotations of the trees: 3</li> <li>Trees grow slower than other households implementing the GFI model due to nutrient-poor soil.</li> </ul>
C10	Bui Thi Kien	1,4	August 2021	05/05 /2022	GPS Latitude 20; 37; 59.259900000046 Longitude 105; 21; 21.45000000011 Atitude 352.01546860782531	100%	<ul> <li>The height of trees ranges: 0,9 – 1,2m</li> <li>The perimeter of tree stumps ranges from: 4 – 6cm</li> <li>Sprouting rotations of the trees: 3</li> <li>Trees grow slower than other households implementing the GFI model due to nutrient-poor soil.</li> </ul>

C11	Bui Van Chuc	0,8	August 2021	05/05 /2022	Longitude 1	20; 38; 59.7299000000057 105; 21; 33.260000000009 469.71951294132043	100%	<ul> <li>The height of trees ranges: 0,8 - 1,2m</li> <li>The perimeter of tree stumps ranges from: 3,5 - 5cm</li> <li>Sprouting rotations of the trees: 3</li> <li>Trees grow slower than other households implementing the GFI model due to nutrient-poor soil.</li> </ul>
C12	Bui Van Hung	1,0	August 2021	05/05 /2022	Longitude 1	20; 38; 54.7500000000000 105; 21; 32.21000000020 142.3735658558972	100%	<ul> <li>The height of trees ranges: 1,0-1,4m</li> <li>The perimeter of tree stumps ranges from: 5 - 7cm</li> <li>Sprouting rotations of the trees: 4</li> <li>The leaves are glossy green, roots are strong</li> <li>Trees grow well and evenly.</li> </ul>

C13	Dinh Van Dau	1,1	August 2021	05/05 /2022	GPS Latitude Longitude Altitude	20; 37; 43.3300000000016 105; 21; 20.789899999974 372.51937457511895	100%	<ul> <li>The height of trees ranges: 1,2 - 1,6m</li> <li>The perimeter of tree stumps ranges from: 6 - 8cm</li> <li>Sprouting rotations of the trees: 4</li> <li>The leaves are glossy green, roots are strong</li> <li>Trees grow well and evenly.</li> </ul>
C14	Quach Thi Hang	1,2	August 2021	05/05 /2022	GPS Latitude Longitude Atitude	20: 37: 21.460000000064 105: 21: 7.900000000232 512.1557881773399	100%	<ul> <li>The height of trees ranges: 1,0 – 1,5m</li> <li>The perimeter of tree stumps ranges from: 5 – 7cm</li> <li>Sprouting rotations of the trees: 3</li> <li>The leaves are glossy green, roots are strong</li> <li>Trees grow well and evenly.</li> </ul>

C15	Bui Thi Dieu	0,9	August 2021	05/05 /2022	GPS Latitude Longitude Altitude	20; 37; 15.6100000000006 105; 21; 2.9298999999881 509.99959935897436	In Dec 2021, 70 trees were destructed by of crickets which were killed by the household immediately after finding it. These dead or broken trees have been replaced by new trees. Currently, the survival rate is 100%.	-	The height of trees ranges: 0,9-1,2m The perimeter of tree stumps ranges from: 4 – 6cm Sprouting rotations of the trees: 3 The leaves are glossy green, roots are strong Trees grow well and evenly.
C16	Bui Van Khoi	0,8	August 2021	05/05 /2022	GPS Latitude Longitude Atitude	20; 37; 11.380000000047 105; 20; 57.52000000018 529.22957983193282	100%	-	The height of trees ranges: 1,2 – 1,5m The perimeter of tree stumps ranges from: 5-7cm Sprouting rotations of the trees: 4 The leaves are glossy green, roots are strong Trees grow well and evenly.

C17	Nguyen Van Quang	1,0	August 2021	05/05 /2022	GPS Latitude Longitude Atitude	20; 37; 28.8600000000005 105; 21; 0.5700000000069 515.0852390852391	100%	<ul> <li>The height of trees ranges: 1,2 – 1,6m</li> <li>The perimeter of tree stumps ranges from: 6-8cm</li> <li>Sprouting rotations of the trees: 4</li> <li>The leaves are glossy green, roots are strong</li> <li>Trees grow well and evenly.</li> </ul>
C18	Bui Thi Hong	1,8	August 2021	05/05 /2022	GPS Latitude Longitude Altitude	20; 37; 40.9900000000054 105; 21; 0.190000000022 467.06332046332045	100%	<ul> <li>The height of trees ranges: 1,1 – 1,6m</li> <li>The perimeter of tree stumps ranges from: 5-7 cm</li> <li>Sprouting rotations of the trees: 4</li> <li>The leaves are glossy green, roots are strong</li> <li>Trees grow well and evenly.</li> </ul>

C19	Dinh Thi Quyen	1,0	August 2021	05/05 /2022	GPS Latitude Longitude Altitude	20; 37; 39,47999999999958. 105; 20; 42,35999999986. 309,53585434173669	. 100%	<ul> <li>The height of trees ranges: 0,8 - 1,1m</li> <li>The perimeter of tree stumps ranges from: 3,5 - 5cm</li> <li>Sprouting rotations of the trees: 3</li> <li>Trees grow slower than other households implementing the GFI model due to nutrient-poor soil.</li> </ul>
C20	Dinh Thi Loan	1,0	August 2021	05/05 /2022	GPS Latitude Longitude Atitude	20; 37; 37.6698999999935 105; 20; 40.27000000018 311.68002003004506	100%	<ul> <li>The height of trees ranges: 1,1-1,3m</li> <li>The perimeter of tree stumps ranges from: 4,5 - 6cm</li> <li>Sprouting rotations of the trees: 3</li> <li>The leaves are glossy green, roots are strong</li> <li>Trees grow well and evenly.</li> </ul>

C21	Bui Thi Ha	1,5	August 2021	05/05 /2022	GPS Latitude Longitude Atitude	20; 36; 45.410000000033 105; 20; 26.65000000023 389.21664050235478	100%	<ul> <li>The height of trees ranges: 1,0 - 1,3m</li> <li>The perimeter of tree stumps ranges from: 4,5 - 6cm</li> <li>Sprouting rotations of the trees: 3</li> <li>The leaves are glossy green, roots are strong</li> <li>Trees grow well and evenly.</li> </ul>
C22	Bui Van Tan	1,5	August 2021	05/05 /2022	GPS Latitude Longitude Altitude	20: 37: 14.6799000000028 105: 20: 57.46990000025 526.38275772526617	In Dec 2021, 120 trees were destructed by of crickets which were killed by the household immediately after finding it. These dead or broken trees have been replaced by new trees. Currently, the survival rate is 100%.	<ul> <li>The height of trees ranges: 0,8 - 1,1m</li> <li>The perimeter of tree stumps ranges from: 3,5 - 4,5cm</li> <li>Sprouting rotations of the trees: 3</li> <li>Trees grow slower than other households implementing the GFI model due to nutrient-poor soil.</li> </ul>

# III. General assessment from households and technical consultants of Farmers' Union and Cooperatives

#### 3.1 Feedbacks from households

- Growth and development of trees: Trees grow well and develop strongly. Compared with trees grown in previous years, trees in 2021 grow and develop more slowly, due to the influence of cold weather lasting from November 2011 to March 2022. Currently, the weather is warm again and rain has begun to appear, the tree has budded and entered a strong growth phase. Compared with trees grown at the same time, in the same geographical area of other households, GFI trees grow better (5-10 cm taller) with strong roots and healthy glossy green leaves. All households affirmed that GFI's trees grow well thanks to high quality seedlings, suitable planting density, and good tending techniques.
- Technical guidance from cooperatives, provincial People's Committees: All of the households are very satisfied when they receive full, enthusiastic, timely technical advice and guidance from technical staff of cooperatives and provincial People's Committees throughout the process from preparing the soil, to planting and tending trees. Especially, households whose trees were damaged by crickets in December 2021, together with technical staff, closely monitored to take remedial measures and plant new trees to replace the dead ones.
- Meaning of GFI afforestation under GFI model: 100% of households participating in GFI afforestation are very satisfied because they receive long-term interest-free loans to invest in afforestation. Besides, trees grow well to help protect the environment, water resource and help households improve their income in the future. All households are committed to implementing tree plantation under GFI model in accordance with the signed agreement.

#### 3.2 Assessment from technical consultants of Cooperatives and Farmers Union

- Trees of households C3, C8, C15, C22 were damaged by crickets in December 2021. This phenomenon has been detected and controlled by households and technicians in time and thoroughly, which has helped reduce great damage to trees. These dead or broken trees have been replaced by new trees and now the trees are growing and developing well.
- Trees of households C3, C5, C8, C9, C10, C11, C19, C22 grow and develop slower than other households implementing the GFI model due to nutrient-poor soil.
- Due to the impact of cold weather lasting from November 2021 to March 2022, the growth and development rate of GFI trees in the 2021 afforestation season is about 10% slower than that in 2019 and 2020. Currently, the weather in the planting area is starting to be sunny, warm and rainy, plus the roots of the plants that have developed, the trees have sprouted new buds and entered the strong growth phase.
- Currently, the survival rate of the trees is 100%. The trees that did not die after the severe cold weather grew again in the warm weather, which can confirm that the selected trees are suitable for the soil and climate in the planting area.

- 19 out of 22 households carried out 4 times of clearing weeds, the remaining three households cleared weeds 3 times and will conduct the 4th time right in May for plants to grow and develop.
- Forest planting households have properly, sufficiently and promptly applied technical measures guided by technical staff.
- The area that GFI plantation model implemented in 2020 and 2021 has now become a place to visit and study for afforestation households in the area. Households implementing the GFI model have also actively shared techniques and experiences with surrounding households.

#### V. Technical interventions for forests in the following year

- Regularly clear weeds so as not to negatively affect the growth and development of trees
- Prune for the first time at the end of 2022 so that the trunk can absorb nutrients as much as it can. That helps the tree grow straight strongly
- Take measures to prevent buffaloes and goats from damaging trees
- take measures to prevent forest fires, especially in hot summer and dry winter
- Regularly visit the forest plot to detect pathogens that cause damage to trees.

#### **IV. Proposals**

- DFE/GFI disburse the last installment of 10% of the total budget approved in the signed agreement.
- DFE/GFI continue to support many other households in term of afforestation capital investment in the future.

#### **CONFIRMATION OF**

HOA BINH FARMERS' UNION

Information collection and report writing unit XUAN PHONG COOPERATIVE

#### Vice chairman

#### NGUYEN THI HUONG HAI

### Director

#### **BUI DUY PHUOC**

CONFIRMATION OF HOA BINH FARMERS' UNION



Information collection and report writing unit PHONG COOPERATIVE HOP TÁC XÃ NONG -LAM NGHIEP

Director BUI DUY PHUOC