

CARD Project Summary Sheet (032/05 VIE)

Project Number and Title: <i>032/05VIE Sustainable and profitable development if acacia plantations for sawlog production in Vietnam</i>			
Vietnamese Institution	Forest Science Institute of Vietnam (FSIV)		
Australian Institution	Ensis, the joint venture between CSIRO and Scion		
Approved date: 2006	Commencement Date: Jan. 2006		Completion Date: Dec. 2008
Project Budget (A\$)	Total: 519,931	From:	AusAID: 277,741 Australian Institution: 128,720 Vietnamese Institution: 113,470
Project Abstract (from Proposal):			
<p>This project supports the development of profitable smallholder tree plantations in Central Vietnam, growing high-value acacia sawlogs for Vietnam's solid-wood processing industries. The project builds the scientific capacity of the Forest Science Institute of Vietnam to breed acacia varieties most suited to sawlog production and to conduct applied silvicultural research to support sustainable and profitable plantations. It will strengthen the extension capacity of provincial and local forest development authorities to demonstrate optimum growing technologies for the improved acacia breeds, and will help tree-farmer groups to optimise financial and labour inputs to suit their local circumstances. Project components include:</p> <ul style="list-style-type: none"> • Formulation of silvicultural guidelines for sustainable acacia sawlog production • Selection of most appropriate breeds for sawlog plantations in central and northern Vietnam, and planning for further genetic improvement to improve sawlog value • Field trials to compare extensive and intensive silvicultural treatments and determine best technologies to boost productivity, sawlog yields, profitability and sustainability for farmers • Financial models to help growers judge profitability and select best silvicultural methods • Training in Australia and Vietnam for managers, scientists, technicians and extension officers 			
Objectives			
<ol style="list-style-type: none"> 1. To review currently available genetic material for acacia sawlog plantations in Vietnam and recommend best available germplasm for sawlog production; 2. To develop guidelines for sustainable plantation silviculture for acacia sawlog production in Vietnam; 3. To demonstrate and verify the recommended package of germplasm and silvicultural techniques for sustainable acacia sawlog production; 4. To strengthen the skills and capacity of staff of the Forest Science Institute of Vietnam in advanced genetic improvement strategies and technologies; 5. To strengthen the skills and capacity of staff of the Forest Science Institute of Vietnam in silvicultural research; 6. To strengthen the capacity of provincial forestry technical and extension staff in acacia sawlog plantation technology transfer to tree farmers; 7. To generate and improve incomes for forest growers, particularly poor forest farmers in rural areas of central and northern Vietnam 			
Milestone completed	Y/N	Milestone completed	Y/N
1. CARD Contract Signed	Y	9. 3rd Six-monthly Report	Y
2. 1 st Six-monthly Report	Y	10. 4 th Six-monthly Report	Y
3. Acacia Genetic Material Review	Y	11. 5 th Six-monthly Report	Y
4. Acacia Silviculture Guidelines Manual	Y	12. Competency Assessment	Y
5. Baselines Established	Y	13. Research Publications/Technical Reports	Y
6. 2 nd Six-monthly Report	Y	14. Project Validation	Y
7. Acacia Silviculture Demonstration	Y	15. Project Completion Report	Y
8. Acacia Pruning Trials	Y		

Reports Produced (Title/Date: E-Expected, D: Delivered):

MS 1. CARD Contract Signed; E: March 2006; D: April 2006
 MS 2. 1st Six-monthly Report; E: September 2006; D: October 2006
 MS 3. Acacia Genetic Material Review; E: December 2006; D: January 2007
 MS 4. Acacia Silviculture Guidelines Manual; E: December 2006; D: February 2007
 MS 5. Baselines Established; E: December 2006; D: May 2007
 MS 6. 2nd Six-monthly Report; E: March 2007; D: May 2007
 MS 7. Acacia Silviculture Demonstration; E: January 2007; D: February 2008
 MS 8. Acacia Pruning Trials; E: July 2006; D: January 2007
 MS 9. 3rd Six-monthly Report; E: September 2007; D: September 2007
 MS 10. 4th Six-monthly Report; E: March 2008; D: April 2008
 MS 11. 5th Six-monthly Report; E: September 2008; D: October 2008
 MS 12. Competency Assessment; E: March 2009; D: June 2009
 MS 13. Research Publications/Technical Reports; E: March 2008; D: April 2009
 MS 14. Project Validation; E: December 2008; D: March 2009
 MS 15. Project Completion Report; E: December 2008; D: March 2009

Members of Evaluation Team:

1. Pham Duc Chien (team leader): Forest Science Institute of Vietnam
2. Le Van Tan: Science Technology and Environment Department
3. Nguyen Ha Hue: CARD
4. Keith Milligan: CARD

Date of Evaluation

10-12 August, 2009

Project completion Evaluation

Evaluation Summary	Score a/	Comments
Relevance	4	<ul style="list-style-type: none"> • The project contributes to wood processing industry by promoting the development of acacia sawlog plantations in Vietnam. • The project however seems to be more relevant to big growers, companies, or the rich rather than the poor forest farmers, the main beneficiaries as stated in the project proposal
Impact	3.5	<ul style="list-style-type: none"> • The capacity of FSIV and other institutions has clearly been improved through a series of training courses, experiment establishment and data analysis. • Documentations, trials and experimentations established by the project would be very good for the development of acacia sawlog plantations in Vietnam. • It may probably take a longer time to improve awareness of farmers to grow acacia sawlog plantation. • Financial modelling suggests that sawlog production is significantly more profitable than for pulp/chip production at MAIs of >15m³ at thinned densities of 600 stems/ha. Profitability improves further at higher MAIs and longer rotations. These models have yet to be fully tested and this is a useful future research area. • As a sawlog plantation lasts very long, perhaps from 10 to 15 years, its impact on the environment will be much greater than shorter rotations
Effectiveness	3.5	<ul style="list-style-type: none"> • The project has a good log-frame, of which activities started from literature reviews, guideline written, trials and experiments establishment, and training and dissemination of the results • However, some experiments are still in progress despite the termination of the project. It is not clear how and who will transfer the results produced by the project to forest farmers.

Efficiency	4	<ul style="list-style-type: none"> • Inputs have been well managed and used • Vietnamese staff could have bigger role in conducting experiments, trials and training courses in Vietnam and a greater role in overall project management
Sustainability	3.5	<ul style="list-style-type: none"> • FSIV and some other institutions will sustain the results of the project such as capacity, documentations, and trials... • There is still a question remaining: who and how to transfer knowledge and skills to the forest farmers. • Long rotation of acacia sawlog plantation may get risk from disease, forest-fire, and typhoon
Average Score	3.7	

Overall Assessment b/: Satisfactory

Major problems Identified:

- Due to time consumption, there are some delays during the implementation of milestones. However, those delays did not significantly impact on the deliveries and results of the project.
- The experiments established in the Central were damaged by typhoon, so that care should be taken in the collection and interpretation of the results from those trials.
- The Silviculture management experiment set up in Dong Ha, Quang Tri is still very young compared with the end of the rotation. Therefore, it really needs continuing protection, management and monitoring for further measurement. A suggestion is that FSIV should find appropriate fund to continuously manage and measure the trial till the end of the rotation.
- There is still a question of whom and how to transfer knowledge and skills developed by the project to forest farmers as the forestry extension network is weak after the termination of the project.

Lessons learned:

- Due to a long rotation of forest plantation, experiments and trials should be carried out as soon as the beginning of the project, so that the project has more time to monitor and evaluate the models. In the future, if a similar trial is proposed for funding, the project proponent should consider the lifespan of the proposed project, and build continuation of project monitoring and evaluation as a key component of FSIV's on-going research programs..
- It is appropriate that the models could be developed from the existing forests (like the pruning and thinning experiments established in Dong Hoi, Quang Binh), so that at the end of the project, much data is collected from the models. The use of the CARD model as a base for the new ACIAR project is another good example.
- Models developed by the project should be continuously monitored and evaluated. The budget for these activities should have priority in annual FSIV work plans.
- As acacia species are planted across the country, and the demand for saw log in the South also very high, the study sites therefore should also be established in the South.
- Training materials should be simple and visible, so that farmers could learn without much difficulty.
- Farmers Training should not be much academic, the method of leaning-by-doing on the field (as conducted in a private field in Dong Hoi, Quang Binh) should be wider applied.
- Extension training courses should mostly be conducted by Vietnamese trainees, due to the high expensiveness of international experts.
- Experiment design may be discussed by both Australian and Vietnamese scientists, and could be implemented by Vietnamese staff, thus improving the efficiency of implementation .
- There is a lack of the extension capacity to transfer knowledge and skills developed by the project to forest farmers and interested parties. FSIV in collaboration with local authorities (including extension agencies) and private companies should share the responsibility to transfer project results to local farmers.

Recommendations:

- FSIV should collaborate with ACIAR, Sub-department of Forestry of Thua Thien Hue, and Forestry Enterprise of Dong Hoi (Quang Binh) to continuously protect, manage and measure the trials established by the project. The results from those trials should be widely shared with CARD and other interested parties.
- FSIV should collaborate with local authorities, forestry extension agencies, and private companies to organize extension training courses for forest farmers after the end of the project.
- Participants participated in previous training courses should play important role in transferring knowledge and skills developed by the project to forest farmers and interested parties.
- As a rotation of sawlog plantation will last long, subsidy should be used to encourage forest farmers to plant sawlog plantation in general and acacia sawlog plantation in specific.

a/ 1 = worst 5 best

b/ Highly Satisfactory, Satisfactory, Moderately Satisfactory, Un-Satisfactory