

COMPLETION REPORT

TRAINING NEEDS ANALYSIS FOR THE BUILDERS' WOODWORKS INDUSTRY IN THE PHILIPPINES

Republic of the Philippines

**FOREST PRODUCTS RESEARCH AND
DEVELOPMENT INSTITUTE**

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EXECUTIVE SUMMARY

The pre-project was proposed to assess the viability of implementing a capacity building program for the builders' woodworks industry in the Philippines with emphasis on determining the training needs of the target sector through a gap analysis of the current situation. The pre-project specifically aimed to determine the: (a) current level of skills and identify required standards for each position/level in the builders' woodworks industry; and (b) training needs of the builders' woodworks industry by identifying gaps between required standards and current skills level.

The pre-project was implemented through the conduct of a survey in Regions I, II, III, IV-A and V in the island of Luzon, Regions VI and VII in the Visayas and Region XIII in Mindanao. A parallel activity carried out was the formulation of standards for each position in the industry. Before the pre-project was implemented, there were no standards for specific positions in the builders' woodworks industry. Based on the survey conducted for the pre-project, standards for specific positions in the builders' woodworks industry were formulated. Training needs identified shall become the basis of a capacity building proposal that shall be submitted to ITTO. It is expected that all training programs and technical assistances intended for the industry shall be based on the results of the pre-project.

Aside from determining the training needs of the workers in the builders' woodworks industry, the pre-project also explored the possibility of implementing a complementation scheme wherein a micro- or small-scale enterprise shall supply some of the production requirements of a medium- or large-scale enterprise and the latter would assist the micro-/small-scale enterprise upgrade its business operations thru transfer of technology. While there is a high level of enthusiasm on the part of the smaller producers, the three (3) large-scale manufacturers of builders' woodworks covered by the survey are likewise open to such scheme.

Although the objectives of the pre-project were correctly identified and outputs achieved, the design of the pre-project could still be improved. Primary area for improvement is the identification of target respondents. Pre-project activities could have included an inventory of builders' woodworks manufacturers, either through actual inventory or through secondary data which could have been obtained from the local government units.

The participation of and cooperation among FPRDI, other concerned government agencies and the industry players themselves contributed largely to the attainment of the pre-project's objectives.

The results of the pre-project, including the standards formulated, can be used as guides in the design of appropriate interventions for the builders' woodworks industry.

1.0 PROJECT IDENTIFICATION

1.1 Context

The Philippine government's visions and goals, as defined in the Medium Term Philippine Development Plan (MTDP), are macroeconomic stability with equitable growth based on free enterprise; agriculture and fisheries modernization with social equity; comprehensive human development; and good governance. The MTDP states that the strategic measures for Philippine industries are to mobilize and disseminate knowledge to upgrade technologies and increase productivity of industries. It is also the aim of the MTDP to increase the value of Philippine exports to US \$ 50 billion by tapping new industries and new markets, developing more competitive export products and services and maximizing opportunities through bilateral and multilateral agreements. Toward this direction, compliance with internationally recognized products and services standards shall be promoted to ensure that locally-produced goods are globally competitive in quality.

In labor and employments, the MTDP is cognizant that the workers are the country's comparative advantage and that there is a continuing need to sustain this advantage by adopting educational, training and technical/vocational programs that will make labor supply more elastic. In this context, the MTDP advocates that technical/vocational training programs shall be continuously improved to meet the critical skills needed in a globalizing economy, as identified through industry signals. For skills training to be of any use, standards for skills certification and assessment of competencies shall be developed based on international standards.

In science and technology, the strategy direction of the MTDP is to use information and capability building to create value-adding, enhance productivity and competitiveness. Technical progress and the pursuit thereof, shall be institutionalized and sustained, which can lead to the sustained increase in incomes.

In support of this, the Department of Science and Technology (DOST) has formulated the National Science and Technology Plan (NSTP), a long-term indicative plan that gives the direction for the development of science and technology for the period 2002 – 2020.

Part of the NSTP is a medium-term component that specifies the strategic programs to be undertaken that will serve as starting points in its implementation, namely: technology transfer, human resource development and S&T promotion, information dissemination, advocacy and linkages.

One of the three major technology transfer programs in the NSTP is the Small and Medium Enterprises Technology Upgrading Program (SET UP) which aims to: (1) improve the viability of micro, small and medium enterprises; and (b) enhance their competitiveness through the infusion of technologies, technical assistance and manpower development.

The Department of Environment and Natural Resources, in its PFP 2001 Policy Statements, identified strategic interventions that the Philippine government can implement in areas of poverty reduction, research and development and good governance. It is the responsibility of the government to promote efficient and environment friendly forest harvesting and utilization, development of competitive forest-based industries, ensure sustainable raw material supply and encourage value-added processing and manufacturing to boost rural employment and economy while satisfying the local and export markets for forest products. This can be achieved through research, development and information dissemination.

1.2 Origin and Problem

The Forest Products Research and Development Institute (FPRDI) is the research and development arm on forest products utilization of the Department of Science and Technology. Established in 1954, it is mandated to: (a) conduct basic and applied research and development on forest utilization based on the needs of the forest-products using and allied industries and the general public; (b) undertake the transfer of completed research and development results to end-users via linkages; and (c) provide technical service and training to various clientele.

In response to the government's call for science and technology to serve as the foundation for future economic development in the Philippines, FPRDI has intensified the provision of technical assistances and trainings to its intended clientele. To be able to provide these services to a greater number of beneficiaries, FPRDI submitted a pre-project proposal to ITTO seeking its support in enhancing the capabilities of targeted forest-based industry sectors.

Builders' woodworks are one of the categories of secondary processed wood products (SPWP). These are made up of joinery and carpentry of wood such as doors, door jambs, windows, window jambs, mouldings, balusters, stairs and railings, shingles and shakes, assembled parquets and shuttering for concrete construction. There is a big demand for SPWP which was estimated at US \$ 9.9 billion in 2005. Major producers of SPWP are Indonesia, Malaysia, Brazil, Thailand and Mexico, accounting for 88% of total exports of ITTO producing countries. The Philippines was reported to have exported only around 7.5% of the total worldwide exports in 2005. The large world market for builders' woodworks presents a good opportunity for the development of the industry. However, increasing the export volume is hampered, among others, by the low level of skills of workers in the micro and small sector of the industry.

In 2001, a survey was conducted by the Furniture and Handicraft Industries Research and Development Program (FHIRDP) of FPRDI to examine the current condition, trends and performance of a builders' woodworks association located in the island of Luzon. One of the issues identified was the lack of woodworking technologies

needed to improve the industry's productivity. New woodworking technologies have not yet been fully accessed by the industry despite the existence of government and non-government institutions that offer the needed trainings and manpower development activities. The same study stated that among the government assistance needed by the association was the provision of technical assistance/services. Technical assistance/services may be in the form of consultancy or advisory services, technology installation or manpower training.

2.0 PROJECT OBJECTIVES AND IMPLEMENTATION STRATEGY

Project Rationale

Before any technical assistance program for the builders' woodworks industry can be implemented, an analysis of the industry's needs should be done first. The pre-project was thus proposed to assess the viability of implementing a capacity building program for the industry, with emphasis on determining the training needs of the target sector through a gap analysis of the current situation. The pre-project would also identify the manpower skills that have to be developed and how they would benefit the builders' woodworks industry.

Development Objective

The pre-project aimed to determine the training needs of the builders' woodworks industry in the Philippines.

Specific Objectives

1. To determine the current level of skills and identify required standards for each position/level in the builders' woodworks industry; and
2. To determine training needs of the builders' woodworks industry by identifying gaps between required standards and current skills level.

Implementation Strategy

To achieve the pre-project's objectives, the following activities were carried out:

- Target firms and/or industry associations that served as respondents to the survey were identified by obtaining directories of builders' woodworks manufacturers from the regional/provincial offices of the Department of Trade and Industry (DTI) and the Department of Science and Technology (DOST). Geographical distribution of the firms was considered in drawing up the sample size, i.e. all the major islands of the Philippines were represented in the sampling list. A sample size of 100 firms was targeted.
- A questionnaire that will assist the pre-project get information on the position/jobs and actual work performed by workers in the builders' woodworks industry was prepared and pre-tested in a builders' woodworks firm in Taytay, Rizal, a town which has a thriving builders' woodworks industry. The questionnaire developed for the pre-project is shown in Annex A.
- Conduct of survey was conducted in Regions I, II, III, IV-A, V, VI, VII and XIII.

- A parallel activity carried out was the formulation of standards for each position/level in the builders' woodworks industry thru a job and task analysis. The job analysis dealt with the identification of duties and tasks required for each position while the task analysis dealt with the breakdown of each task into component steps, specifically safety elements, standards in knowledge, attitudes, skills and habits. Available materials on job and task analysis for workers in the builders' woodworks industry were collated and reviewed to assist the pre-project in coming up with the standards. The standards were formulated in consultation with the National Experts and Consultants.
- Training needs for the workers in the builders' woodworks industry were identified by comparing the current skills levels against the standards based on the job and task analysis. Non-training activities that can be conducted to help improve the industry were also identified.
- The training needs identified were presented to the respondents to validate the findings of the pre-project. Initially, a seminar-workshop involving the stakeholders was planned to present and validate the findings of the TNA. However, because of the logistics involved in gathering all stakeholders from the eight (8) regions comprising of 18 provinces and almost 250 individuals, validation was done by revisiting respondents with identified training needs and presenting to them the findings of the project. Counterparts from the Department of Science and Technology and/or the Department of Trade and Industry accompanied the pre-project team during the validation visits.
- Based on the training needs identified, a project proposal on capacity building for the builders' woodworks industry was prepared.

Identified Assumptions and Risks

A major assumption of the pre-project was that firms engaged in the manufacture of builders' woodworks are also engaged in the production of furniture and are members of the Chamber of Furniture Industries of the Philippines (CFIP). Since FPRDI has had several collaborative projects with the CFIP, both on the national and regional levels, requesting their assistance in the implementation of the pre-project would not be a problem. Likewise, FPRDI also maintains close linkages with the Department of Trade and Industry (DTI); in areas where the firms engaged in builders' woodworks manufacture are not organized into associations, the assistance of DTI shall be solicited. The assistance required from CFIP and DTI would be in the form of identifying respondents and arranging interview schedules with them.


There were no major risks identified in the pre-project aside from the possibility of target respondents not cooperating and refusing to give needed information.

3.0 PROJECT PERFORMANCE

Start Date: 08 August 2008


Duration: Twelve (12) months (with extension until October 2009)


SPECIFIC OBJECTIVE/ OUTPUT/ACTIVITY	Month														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Specific Objective 1: To determine the current level of skills and identify required standards for each position/level in the builders' woodworks industry															
Output 1.1 Inventory of existing positions/jobs in the builders woodworks industry. including actual work performed by each position															
Activity 1.1.1 Identify target firms/industry associations	As planned	As implemented													
1.1.1.1 Obtain directory of builders' woodworks manufacturers from the regional/provincial offices of the Department of Trade and Industry and national/provincial chapters of the Chamber of Furniture Industries of the Philippines (CFIP)	As planned	As implemented													
1.1.1.2 Draw survey sample from list generated in Sub-activity 1.1.1.1 and establish linkage with identified survey respondents	As planned	As implemented													
Activity 1.1.2 Preparation of questionnaire	As planned	As planned													
Activity 1.1.3 Conduct of survey			As planned	As planned	As planned	As implemented	As implemented	As implemented	As implemented	As implemented	As implemented	As implemented	As implemented		
Activity 1.1.4 Data collation and interpretation			As planned	As planned	As planned	As planned	As planned	As implemented	As implemented	As implemented	As implemented	As implemented	As implemented		
Activity 1.1.5 Prepare report on inventory of positions/jobs and actual work performed by each position							As planned					As implemented	As implemented		
Output 1.2 Formulate standards for each position/level in the builders' woodworks industry thru a job and task analysis															
Activity 1.2.1 Collate and review available materials on job analysis (duties and tasks required for each position)	As planned	As planned	As planned	As planned											

 As planned

 As implemented

SPECIFIC OBJECTIVE/ OUTPUT/ACTIVITY	Month														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Activity 1.2.2 Collate and review available materials on task analysis (breakdown of each task into component steps – safety elements, standards in knowledge, attitudes, skills and habits)	As planned	As implemented	As implemented	As implemented											
Activity 1.2.3 Formulate job and task analysis in consultation with National Experts and Consultants				As planned	As planned	As planned	As planned	As planned	As implemented	As implemented	As implemented	As implemented			
Activity 1.2.4 Prepare report on job and task analysis									As planned					As implemented	
Specific Objective 2: To determine training needs of the builders' woodworks industry by identifying gaps between required standards and current skills level															
Output 2.1 Identified training needs															
Activity 2.1.1 Identify gaps between required standards and current skills level									As planned	As planned				As implemented	
Activity 2.1.2 Determine training needs based on identified gaps									As planned	As planned				As implemented	
Activity 2.1.3 Prepare report on identified training needs										As planned					As implemented
Output 2.2 Project proposal on capacity building for the builders' woodworks industry															
Activity 2.2.1 Conduct a seminar-workshop involving stakeholders to present and validate findings of training needs analysis											As planned				As implemented
Activity 2.2.2 Prepare project proposal on capacity building for the builders' woodworks industry to address training needs identified												As planned			As implemented

 As planned

 As implemented

Total Amount of Expenditures and Applied Inputs

The pre-project operated with total funds amounting to US \$ 79,199.00 contributed by ITTO and US \$ 8,050.00 representing counterpart contribution of the Philippine government.

The ITTO funds supported the implementation of the various activities of the pre-project included in the project proposal and plan of operations toward the delivery of the expected outputs. The counterpart funds were primarily in-kin consisting of necessary office facilities, counterpart personnel and support management staff.

As of December 2009, there was an unspent budget amounting to US \$ 4,940.00 from the ITTO contribution.

4.0 PROJECT OUTCOME, TARGET BENEFICIARIES INVOLVEMENT

The pre-project was able to attain the objective of determining the training needs of workers in the builders' woodworks industry. This was done by determining the current level of skills of the workers and comparing these with the standards which were developed by the pre-project.

Before the pre-project was implemented, there were no standards for specific positions in the builders' woodworks industry. The Technical Education and Skills Development Authority (TESDA), the government agency tasked with establishing a quality-assured Technical Vocational Education and Training System, was in the process of developing a TESDA Occupational Qualification and Certification System (TOQCS) to ensure that vocational education and training graduates have the desired skills and knowledge competencies required by the industry. There was no assurance that training programs conducted for the builders' woodworks industry were in response to the actual needs of the workers.

Based on the survey conducted for the pre-project, standards for specific positions in the builders' woodworks industry were formulated. Current skill levels of workers were determined thru interviews conducted using a prepared questionnaire and thru observations of the pre-project staff. Training needs identified shall become the basis of a capacity building proposal that shall be submitted to ITTO. It is expected that all training programs and technical assistances intended for the industry shall be based on the results of the pre-project.

Aside from determining the training needs of the workers in the builders' woodworks industry, the pre-project also explored the possibility of implementing a complementation scheme wherein a micro- or small-scale enterprise shall supply some of the requirements of a medium- or large-scale enterprise and the latter would assist the micro-/small-scale enterprise thru transfer of technology. The three (3) large-scale manufacturers of builders' woodworks are open to such scheme.

This manufacturing integration option can be set up initially on a pilot-scale in a specific area. Depending on the level of success, the scheme can be replicated in other selected areas of the country.

For more than 30 years, FPRDI has been conducting training courses specific to wood processing which include production of builders' woodworks. The Institute can take the lead in drawing up and implementing long-term standards-based manpower development programs in close collaboration with other small and medium industry development agencies/offices like TESDA and DTI.

5.0 ASSESSMENT AND ANALYSIS

On project rationale and project identification process

The problem to be addressed by the pre-project was correctly defined based on the overall context. The pre-project was formulated as a result of dialogues conducted with representatives of the stakeholders – the builders' woodworks manufacturers and concerned government agencies. This is in addition to the review of available pertinent reports and other documents on the builders' woodworks industry in the country.

On adequacy of project objectives and implementation strategies

The pre-project's strategy was appropriate and effective in achieving the objectives and accomplishing the expected outputs. The pre-project's team was composed of personnel with the required background and long practical experience in the different aspects of forest products utilization, particularly on secondary wood processing. The team worked together to develop the standards needed by the pre-project in determining the training needs of workers in the builders' woodworks industry.

The most critical differences between planned and actual project implementation

The differences between planned and actual project implementation did not adversely affect the delivery of the required outputs. Adjustments in the work plan only involved additional time in the conduct of certain activities hence an extension in time was necessary. All components of the pre-project were addressed with the resources and inputs provided by the ITTO and FPRDI. Adjustments in the work plan led to the extension of the pre-project's implementation from 12 months to 15 months.

On adequacy of time and project Inputs for project formulation and implementation

There was adequate time in the formulation of the pre-project and the provision of funding was made available to carry out the activities on time.

External influences and mitigating measures

There was no need to carry out/adopt mitigating measures to counter whatever negative effects external influences might have had on the pre-project's implementation.

Participation of anticipated and actual project beneficiaries

The results of the pre-project shall form the basis of the capacity building program that will address the training and non-training needs of the builders' woodworks industry. Target recipients of the capacity building program are the respondents of the survey conducted for the pre-project. Owing to assumed similarity of operations to the firms surveyed, the non-respondents are expected to have similar training requirements. Thus, they will also become future beneficiaries.

Sustainability after project completion

The sustainability of the pre-project will be largely dependent on the approval of the capacity building proposal for the builders' woodworks industry, one of the outputs of the pre-project.

Roles and responsibilities of institutions involved with project implementation

Identification of target respondents was done with the assistance of the concerned government agency-partners, namely the Regional/Provincial offices of the Department of Science and Technology Regional/Provincial offices and the Department of Trade and Industry. Coordination in the field was also spearheaded by these agencies, thus facilitating the conduct of interviews.

The support and cooperation of the pre-project's respondents were also commendable. They provided the pre-project with inputs and feedbacks that helped in the formulation of the standards and identification of training needs.

6.0 LESSONS LEARNED

Project identification and design

Although the objectives of the pre-project were correctly identified and outputs achieved, the design of the pre-project could still be improved. Primary area for improvement is the identification of target respondents. Since there were no available information on the actual number of builders' woodworks manufacturers, sampling size was arbitrarily decided and results may just be fair indications of the true state of the builders' woodworks industry in the Philippines. Pre-project activities could have included an inventory of builders' woodworks manufacturers, either through actual inventory or through secondary data which could have been obtained from the local government units. The pre-project also failed to factor in the time involved to set up appointments with target respondents. Since all of the respondents were businesses, the pre-project had to work on their available time to conduct the survey.

Operational matters

- The composition of the pre-project team proved effective in achieving the pre-project's objectives. The members, with their different backgrounds and experiences complemented each other in addressing the concerns of developing standards for workers in the builders' woodworks industry and identifying their training needs.
- FPRDI has established linkages with both government agencies and the forest-based industries that greatly helped in the conduct of the pre-project.
- Monitoring and evaluation of the progress of the pre-project was done regularly. Monthly project meetings were conducted to discuss the progress of the pre-project. Survey results and findings and progress reports were regularly prepared, disseminated to and discussed among team members. The pre-project was also monitored and evaluated regularly by the concerned FPRDI unit where it was administratively situated. Periodic evaluations were also conducted by FPRDI.

7.0 CONCLUSIONS AND RECOMMENDATIONS

- The pre-project was able to achieve its objectives of identifying the training needs of workers in the builders' woodworks industry thru the identification of training gaps based on standards formulated. This was done through the participation of and cooperation among FPRDI, other concerned government agencies and the industry players themselves.
- Although the pre-project was able to come up with a representative sample of the industry, the pre-project could have conducted an actual inventory of all builders' woodworks manufacturers. This could help determine a more appropriate sampling size so that a more exact picture of the industry's needs could be obtained.
- The results of the pre-project, including the standards formulated, can be used as guides in the design of appropriate interventions for the builders' woodworks industry

Responsible for the Report

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