



**TOGETHER**  
*for a sustainable future*

## OCCASION

This publication has been made available to the public on the occasion of the 50<sup>th</sup> anniversary of the United Nations Industrial Development Organisation.



**TOGETHER**  
*for a sustainable future*

## DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

## FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

## CONTACT

Please contact [publications@unido.org](mailto:publications@unido.org) for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at [www.unido.org](http://www.unido.org)

20462

Distr.  
RESTRICTED

IO/R.294  
26 November 1993

UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION

ORIGINAL: ENGLISH

---

INTEGRATED DEVELOPMENT PROGRAMME FOR THE  
WOODEN FURNITURE INDUSTRIAL SYSTEM

XP/GLO/93/096

Technical report: exploratory mission \*

Prepared for the Government of the  
Democratic Socialist Republic of Sri Lanka  
by the  
United Nations Industrial Development Organization

Backstopping officer: R.M. Hallett  
Agro-based Industries Branch

---

\* This document has not been edited.

## TABLE OF CONTENTS

	Pages
1. INTRODUCTION	1
2. SUPPLY OF MATERIALS	1
2.1 Wood	1
2.1.1 Pine	3
2.1.2 Rubberwood	3
2.1.3 Palms	4
2.1.3 Imports	4
2.2 Other materials	4
2.3 Equipment and machinery	5
3. STRUCTURE AND STATUS OF WOODWORKING SECTOR	5
3.2 Structure of Industry	5
4. HUMAN RESOURCES	8
5. PROBLEMS AND CONSTRAINTS	9
6. PROSPECTS	10
7. CONCLUSIONS	11
ANNEX 1 - List of persons contacted	12

## 1. INTRODUCTION

1. The programme concept "*Integrated Development Programme for the Wooden Furniture Industrial System*" (WFIS) was developed with collaboration between the Integrated Programme Support Unit and Agro-based Industries Branch and submitted to the Industrial Cooperation and Funds Mobilization Division by memorandum of 15 March 1993. The objectives of this programme are to promote integrated development of the WFIS, facilitate policy and strategy formulation and implementation, release major technical and commercial bottlenecks affecting the system and identifying investments with the overall objective of increasing production, productivity and product quality of the wooden furniture and builders woodwork sub-sectors. Funds were subsequently approved under project XP/GLD/93/096 to cover the expenses of short staff-member and consultant missions to make preliminary assessments of the preparedness of each country for such a programme.

2. Sri Lanka was selected as one of the six countries targeted to determine whether this integrated approach should be pursued further in the country. An Industrial Development Officer from the Wood Unit of the Agro-based Industries Branch, visited Sri Lanka 25 - 30 September on his return from a two-week mission to Malaysia concerning development of the rubberwood processing industries.

3. Meetings were arranged with representatives of Government, industry and the donor community to sound out policies, priorities and interest in developing this subsector. The list of persons contacted comprises Annex I.

4. Unfortunately, the mission was officially approved by the Sri Lankan Government only a few days beforehand (23 September) and it was not possible to arrange to meet as many of the industry representatives as would have been preferred. Nevertheless, contacts made in Kuala Lumpur with Sri Lankan participants made up for this shortcoming to a considerable extent.

## 2. SUPPLY OF MATERIALS

### 2.1 - Wood

5. The Ministry of Lands and Forests, Department of Forestry is responsible for the supply of traditional species following standard forestry procedures. These are, in Sri Lanka, complex and in general probably not suited to development of modern industrial processing. Some measure of control is exercised through checks on transport of logs but officials are aware that significant illegal felling and transport is done and are increasing their efforts to reduce it.

6. The Forestry Master Plan (FMP) for Sri Lanka was produced in September 1986 and provides the basic background information on forested land, wood production from both natural and plantation forests as well as farm woodlots and analyses

industrial development of the sector. At that time, natural forests were expected to provide a decreasing volume of sawn timber while forest plantations and non-forest sources were expected to provide an increasing volume.

7. Demand was expected to exceed supply and although some of the shortfall was then expected to be made up from rubberwood production it was noted that the domestic market would only absorb limited volumes because of unfamiliarity as with coconut wood.

8. A draft revision of the Forestry Master Plan was obtained during the mission which pointed up deficiencies in the previous FMP and attempted to reorient policy taking into consideration the socio-economic, environmental and political changes in the country since 1986. The revision emphasises the continuing nature of such a plan which will consist of three sub-sectoral reports:

- man and environment;
- forest production and utilization;
- institutional development.

9. Wood-based industrial development will cover studies of forest product markets, forest industry and wood utilization and wood supply. The sub-sectoral report "*Forest Production and Utilization*" will have six components including wood-based industrial development as well as forest-plantation development and non-forest wood production.

10. The FMP states that "a long-term development programme will be drawn up for improving existing industries and establishing new ones, consistent with demand projections and financial viability. Special attention will be paid to the utilization potential of pine and rubberwood. The role of the private forest industries in relation to the state ones will also receive due attention."

11. The schedule is currently to produce a final master plan towards the beginning of 1995. It is evident that an integrated wooden furniture and builders woodwork technical assistance programme would fit into this policy.

12. One observation is that the Coordinating Committee which has been established to facilitate the coordination of working group activities lacks any representation from the Ministry of Industry and the private woodworking industry sector. Otherwise, the Forestry Planning Unit of the Ministry of Forestry appears to be doing a commendable job with ample support from international sources, mainly FINNIDA.

13. Plantations, both forest (mainly pines, eucalyptus, teak) and non-forest (rubberwood, coconut wood, palmyra and kitul palm) are of particular relevance when considering raw material for industrial production. So also is rattan which is alleged to be of poor quality thus necessitating imports. Private plantations

are now allowed by the Forest Department. These materials are considered separately as follows.

#### 2.1.1 Pine

14. Some of 15,000 ha of pine plantations (primarily *Pinus caribaea*) were established for the local paper industry but is now "available" for other uses. At the time of the mission, a utilization study done in July 1993 was available in draft form<sup>1</sup> which gave general information about pine but did not make specific recommendations. Currently, wood is available in theory, but practically, the State Timber Corporation still controls sales.

15. In general terms, saw log volumes available are estimated to be:

Years	M <sup>3</sup> /year
1993 - 1997	72,000
1998 - 2002	81,000
2003 - 2007	264,000
2008 - 2012	297,000

16. The plantations are now only about 15 years old and in the early years, (up to 2003) the harvest will be mostly thinings and the saw logs produced will have a large proportion of juvenile wood. After 2003 the saw log volumes will be sufficient for a substantial industry. However, the destructive "slaughter tapping" methods will have to be stopped and tapping rights in general sorted out. Also an auction system should be established to distribute the harvest.

#### 2.1.2 Rubberwood

17. Rubberwood has been the subject of great interest in recent years in South-East Asia and a study by the Rubber Research Institute based to a large extent on a questionnaire to plantation owners and management firms requesting information on replanting programmes over the next 10 years provides ample information on the status in the country.<sup>2</sup> In general terms,

<sup>1</sup> Funded by UK/ODA and prepared by John Clegg and Co. Edinburgh.

<sup>2</sup> A condensed version of the study was presented at the International Forum on Investment Opportunities in the Rubberwood Industry, 20 - 22 September 1993, Kuala Lumpur, Malaysia, "Status of the Rubberwood Plantations and the Rubberwood Industry in Sri Lanka", S. W. Karunaratne, Deputy Director (Research), Rubber Research Institute of Sri Lanka.

some 200,000 ha. of plantations should yield between 630,000 and 900,000 m<sup>3</sup> of industrial wood, based on replanting 3% annually. About 25% (150,000 - 200,000 m<sup>3</sup>) could be considered suitable for sawing.

18. Rubberwood is basically produced in the South and South-West part of the country and presents the best opportunity (as also pointed out in the ITC study) for developing an improved industrial wood sector. Of particular relevance is the opening for privatization in June 1992 of plantation management (tea and rubber especially) which opened the possibility of investment in diversification including rubberwood processing. The development of clone RRIC-121 which is said to produce 20 foot unbranched stems as well as increased latex yields is an important step towards more rubberwood production.

### 2.1.3 Palms

19. Coconut and palmyra plantations are not treated as formally as rubber (and tea) plantations since small holders and family lots predominate. Coconut stems are mainly hewn for use locally as roof rafters and for miscellaneous constructions, with little thought given to its use for furniture, parquet or timber framing. Palmyra is currently the subject of a UNDP project in collaboration with the Palmyra Development Board (a para-statal body under the Ministry of Plantation Industries). Palmyra grows mainly in the North and East of the country and there are apparently abundant supplies but the project was unable to do a proper survey owing to the political problems there. The wood is as hard as coconut wood and has been used traditionally for roof rafters. However, a pilot factory in Dehiwela, about 5 Km South of Colombo is producing brushes, woodenware, tea trolleys and similar small articles.

20. The hard fibres from leaves is suitable for brushes and the sap has a higher sugar content than coconut palm and is used for toddy treacle, with the fruit being used to make candies. Consideration is being given to growing palmyra plantations in the South as an industrial raw material.

### 2.1.3 Imports

21. Finally, sawnwood and plywood is imported to make up the wood shortfall. Kempas is nominally imported from Malaysia although this consists apparently of a wide mixture of South-East Asian species and there are many problems associated with the processing of such a mixture by an underdeveloped industry. Rattan is imported from Singapore.

## 2.2 - Other materials

22. Most ancillary materials required to complement secondary wood processing are available in the country but often not of the

quality nor type required for export. For example: sandpaper is made but not for wide-beltsanders; local lacquers are not of the acid-catalysed type.

23. Import duties have been high on products such as sandpaper and lacquers but the current policy is to reduce the level of protection of local industry so that by 1994 the maximum duty would be 35% (down from 50%) with the intention to reduce this to 20% within two or three years.

The current tariffs are, in general, applied:

- basic raw materials 10%
- semi-processed products 20 - 25%
- more processed products 35%
- finished products 50%.

24. Fabrics are currently subject to a 100% import duty owing to strong local pressure to protect textile companies but the intention is to reduce this to 50% soon and then to 35%.

25. Annex 2 shows current import tariffs for some products related to this sector as received from the Ministry of Industry.

### 2.3 - Equipment and machinery

26. As with the other materials, most is available locally and is patterned after Indian models. It was impossible within this short mission to cover this area properly but at least one firm, Alcobronz, makes basic woodworking equipment such as drill presses. If imported machinery is used for manufacturing export products, import duties may be recovered.

## 3. STRUCTURE AND STATUS OF WOODWORKING SECTOR

### 3.2 - Structure of Industry

27. There are a few Government sawmills with manufacturing facilities under the responsibility of the railways, the port authority, the Ministry of Lands and Forests (State Timber Corporation) and the Ministry of Tourism and Rural Industries (Borwood Ltd.).

28. The State Timber Corporation is in the process of privatization and discussions are currently underway as to its future role. Borwood Ltd. was a pioneer in the use of rubberwood during the 1970's supported by a Government policy of specifying rubberwood for school furniture. It was the counterpart to a UNDP - UNIDO project (DP/SRL/79/053) which, inter alia, introduced finger jointing and glued laminated beam manufacture but the rubberwood processing technology was never disseminated within the country and Borwood no longer makes glulam beams.

29. The private sector is characterized by a great many small, traditional sawmill/cum workshops (following the pattern in India some 20 years ago) which produce a wide variety of wooden



articles for the local markets. They are basically wasteful in that they under-utilize the raw material although such is the demand for wood that almost every piece is eventually used for something. (An example was seen of top quality sawn mahogany cants being cut into short legs for sofas instead of being used for, eg. decorative sliced veneer or high value-added export products.)

30. There is virtually no drying done which, as in so many other countries, causes machining, gluing and finishing problems in further processing. Most machinery is obsolete, inadequate and even home-made and working conditions are very poor.

31. The formal sector is comprised of only about 20 enterprises making household and office furniture, kitchen cupboards, plywood (on a small scale), flooring including parquet, brush backs and handles, wooden toys and various handicrafts. A few are well-established with over 100 employees while others could be termed medium-sized, employing between 30 and 60 workers.

32. Some new firms have based their production solely on rubberwood and are exporting basic furniture, brush backs and toys. The report prepared by Mr. Horatio Brion under project DU/INT/92/012 (IO/R.269) showed 21 plants processing rubberwood.

33. Data on wood processing enterprises is not readily available and official sources differ on statistics. The Ministry of Industries, Science and Technology (MIST) lists 20 companies manufacturing

- a) wooden and cork products except furniture - 13 companies, and
- b) furniture and fixtures, except primarily of metal - 7 companies.

34. On the other hand, an ITC assisted project "Regional Programme for Wooden Products"<sup>3</sup> evaluated 16 enterprises and considered that only 6 were then (1992) capable of producing sufficient quantities for export buyers. Four of these were not included in the MIST list.

35. Conclusions from this evaluation were that the level of technology was poor with only one exception (a company making brush blocks) and that the management was characterized by a lack of aggressiveness and hands-on leadership which accepted poor machining and handling practices by workers. Furthermore, labour productivity, partly due to poor management, was below the level required for exports. On the other hand, labour was considered to be competitively priced and capable of adequate productivity

---

<sup>3</sup> Project SRL/87/008 "Industry evaluation and programme recommendations, furniture and wood products, Sri Lanka", by Messrs Arthur J. Raymond and William S.G. Vernon, 5 August 1992.

with carving and hand painting skills readily available. Various recommendations were made which included "UNIDO-type inputs" at both enterprise and national levels.

36. Most building contractors and construction firms have their own joinery workshops for making windows and doors. These are made to non-standardized dimensions (unless for National House Development Authority projects) and traditionally use jack wood which is considered to be durable but is becoming more and more scarce.

37. The Institute for Construction Training and Development (ICTAD) which was established with World Bank and UNDP assistance, has the objective of improving efficiency of construction. Their aim is also to induce local participation in large projects (over \$ 10 million) and to introduce proper technology, lesser-known species and decrease waste. Its future is uncertain since support will soon cease and survival will depend on generating income from training and consultancy work.

38. A UNDP/UNIDO project (DP/SRL/91/031) is assisting the MIST to establish a database and industrial production index (turnover, employees, etc.) but so far the wood sector has not been covered.

39. The Export Development Board was aware that the processing and technology aspects had been given insufficient emphasis, partly due, it may be suggested, to the non-technical orientation of their staff. There is a Board of Investments within MIST which has produced a leaflet explaining policy. Three levels are recognized:

1. Areas reserved for local industry (incl. retailing, money lending, coastal fisheries, pawn brokering and one other)
2. Products not closed to foreigners but which need permission (eg. civil aviation)
3. Others, determined on a case-by-case appraisal if more than 40% is foreign (eg. timber).

40. The industry is "represented" by numerous bodies, both public and private sectors, including the Industrial Development Board and numerous Chambers of Commerce. Although there is a Federation of Chambers of Commerce and Industry of Sri Lanka, a National Exporters' Association, a Sri Lanka Wooden Furniture and Wood Products Manufacturers' and Exporters' Association, a Ceylon National Chambers of Industries, a Federation of Exporters' Association of Sri Lanka and a Ceylon Chamber of Commerce, to name but a few, it is most likely that these act more for their own development and that of their executive than for the development of the industrial sectors they are supposed to represent.

41. The same could be said of the various ministries proppoting to assist or otherwise deal with this sector of industry. There is much overlapping of responsibilities and activities with, for example, 17 ministries apparently involved in training in this sector. Similarly, research is undertaken by the Industrial Development Board (Ministry of Tourism and Rural Industries), by the Ceylon Institute for Scientific and Industrial Research (Ministry of Industry, Science and Technology) and by the Rubber Research Institute (Ministry of Plantations). There are probably others not identified during the mission.

#### 4. HUMAN RESOURCES

42. Because woodworking has been viewed traditionally as a craft operation, the current entrepreneurs and management of woodworking companies have not benefitted from an industrial wood technology background. Their origins have more likely been as traders or they have invested in wood processing from a business or service background.

43. Workers in this sector have normally been trained as artisans or carpenters in one of the 52 training establishments run by the Ministry of Tourism and Rural Industries. The feeling is that these are rudimentary and are not linked to industrial concepts.

44. This combination has meant that there is a wide gap between the owner or top management and shop floor workers. Technical or middle management is conspicuously absent as was pointed out in the ITC report mentioned earlier.

45. The Ministry of Youth Affairs has a National Apprenticeship Industrial Training Authority (NAITA) and the Ministry of Higher Education is also active in vocational training. In fact, it was suggested that "industry" could take over management of one of the Government training centres a few kilometers South of Colombo at Ratmalana. Rationalization of training was seen as a priority.

46. The Italian Government is funding the DON BOSCO Technical Centre in Negombo including woodworking machinery but the programme was not available.

47. Of particular interest is the German-funded "German Technical Training Institute" in Moratua which has five divisions including woodworking. They work on the "dual system" to produce skilled labour as in Germany whereby students spent 1½ years in the Centre and 1½ years working in companies spread over two, 9-month periods.

48. Their graduates immediately get jobs as foreman or technical supervisors and current intake is 16 students twice per year in January and July. The project plans to increase this to 24 students per intake. The equipment is completely up-to-date and students also get involved in design work and finishing. They

also learn about business aspects and some graduates have gone to Singapore to work for Japanese companies who want to open a plant in Colombo.

49. There is also an Apprenticeship Training Institute (ATI), also sponsored by Germany, which includes woodworking.

50. The American USAID programme is supporting a programme "Technology Initiative for Private Sector" (TIPS) with four sectors but not including woodworking. This involves company diagnostics and identification of specific problems, marketing and part financing of participation in exhibitions. Some equipment for quality control and laboratory work is also covered and much use is made of the International Executive Service Overseas Programme to provide expertise in the form of retirees from the USA, UK, Canada and the Netherlands especially.

51. Much of these international efforts are aimed at up-grading the human resource in terms of both skills and management attitude as well as providing specialized consultancy advice.

#### 5. PROBLEMS AND CONSTRAINTS

52. The main problem is that the entire structure of this industrial sub-sector has "developed" with no direction nor long term planning, probably because of the many Government bodies involved and the surfeit of private sector chambers, associations and federations that have grown up.

53. The industry suffers from the whole range of technological shortcomings and probably because of the traditional craft basis, a lack of awareness or appreciation on the part of many Government officials and financial agencies of its potential as a serious industrial sector.

54. International assistance has been provided but without real coordination owing to the fragmented structure, although a small number of programmes have been appropriately focused and are no doubt successful (eg. the TIPS and GTTI programmes).

55. Wood supply is increasingly difficult unless plantation resources are tapped in an organized way. This means addressing the problem of involving small holders in the industrial sector and solving the logistics problems of harvesting rubberwood in a continuous flow.

56. Since Sri Lanka is a generally low income country there is an overall lack of appreciation of quality standards and thus no demand-driven incentive for improved methods of processing. The general opinion of lesser-known species and certainly of rubberwood and coconut wood is that these are far inferior to the preferred species such as jack wood, sateen, mahogany and ebony which have traditionally been used for high quality furniture and joinery. It was probably this attitude which caused a recent Australian private sector initiative to fail in their venture to

process coconut wood. Even though the products were relatively cheap and well made the lack of public acceptance defeated the enterprise. Without an appreciation of either the appropriate technology or the characteristics of coconut wood, the effort required to surmount these problems was more than the venture could stand.

57. It is felt by some representatives of industry that people are generally open to ideas but the process to implement them is complicated and decision times are long within both Government and private sector circles thus tending to exhaust the financing before profits are made.

58. The situation with regard to pine utilization, is similar to that of coconut wood in that its suitability as a furniture material is virtually unknown and those making decisions on its use are hampered by a restricted range of vision and hence options. The mechanisms for its distribution must also be set up.

59. These problems combined with poor market information cause project proposals to be poorly prepared and unconvincing in the eyes of possible funding agents.

## 6. PROSPECTS

60. The woodworking industries are virtually essential for most societies and despite the problems enumerated above, in the long run, there is good potential for improvement in Sri Lanka. Current efforts to promote export-oriented secondary processing industries based on rubberwood should be strengthened and enlarged to include other woody plantation materials.

61. Since the situation is one of having the appropriate technology readily available, this indicates that attention should be focused on changing the attitudes of both Government officials and private sector entrepreneurs with regard to adoption of industrial methods and introducing appropriate training schemes for people at all levels. Considerable efforts should be devoted to simplifying bureaucracy and removing duplication of responsibility within Government circles and on coordinating international and national programmes which are related to this sector.

62. The Ministry of Industry, Science and Technology should take the lead in coordination and development of the wood processing sector as an integrated industrial development problem which would include improving and increasing local production of the considerable range of other materials used in manufacturing wooden products, such as textiles, hardware and fittings, finishing lacquers, sand paper, machine tools and equipment.

63. Such a programme should begin with plantation species because of the environmental factor but with the longer term objective of modernizing the traditional woodworking sector.

Also, an "Institute of Wood Technology" or similar, should be considered, with a mixed board, that would oversee and guide the sector's development.

## 7. CONCLUSIONS

64. Sri Lanka is at the right stage to embark upon an integrated programme for the woodworking sector and a full preparatory mission should be launched to draft a project document. Two international consultants should be engaged with experience in:

- (i) Woodworking machinery, furniture/joinery manufacture; and
- (ii) Commercial/trading aspects including work in associations and links with Government.

65. This preparatory phase should last two months and involve staff member travel to Sri Lanka to participate in the second Workshop organized to ensure full understanding and support on the part of both Government and industry, as well as the final stages of document preparation.

66. A provisional budget for this stage would be:

BL		m/m	US \$
11-50	Consultants	2	30,000
15-00	Project travel		1,000
16-00	S/M travel (10 days)		5,000
19-00	Total personel	2	36,000
51-00	Miscellaneous		1,000
99-99	<b>G r a n d t o t a l</b>	2	37,000

**ANNEX I****List of Persons Contacted****Ministry of Finance**

Ms. N. Madanayaka, Director  
External Resources Department

**Ministry of Industries, Science and Technology**

Mr. Luxman Siriwardena, Director  
Investment Division

Mr. Dayarathna, Deputy Director  
Sectoral (Wood) Division

Mr. W.C. Dheerasekera, Director  
Programme Division

**Ministry of Tourism and Rural Development**

Mr. Kumaradasan, Director  
Planning Division

Mr. H. Simpala, Acting Director

Mr. S. Walpola, Consulting Engineering  
Velona, Mechanized Woodwork Training Institute

Mr. M.H. Ariff, Working Director

Mr. D.W. de Silva, Factory Manager  
Borwood Ltd.

**Ministry of Lands and Forests, Forest Department**

Ms. Kumaradasa, Director  
Forestry Planning Department

**Export Development Board**

Ms. Manel Pandittesekere Rodrigo, Director

Ms. Siromi Fernando, Assistant Director  
Product Management

**Rubber Research Institute**

Dr. L.M.K. Tillekeratne, Director

Ms. Sisira W. Karunaratne, Deputy Director, Research

**Institute for Construction Training and Development**

Mr. G.A.K. Gajaweera, Director, Training

Mr. Clement Liyanarachchi, Deputy Director, Technology  
Federation of Chambers of Commerce and Industry of Sri Lanka

Mr. Patrick Amarasinghe, President  
Ceylon Chamber of Commerce

Mr. Chandra de Silva, Acting Director  
Ibrahim Jafferjee Inc.

Mr. Moosafer Jafferjee  
Woodplex Ltd./Furnifits Ltd.

Ms. A. Kulatunga, Director  
Mr. Gamini Gunasiri, Marketing Manager  
Free Lanka Managemeng Company (Pvt.)Ltd.

Mr. Malcolm Peiris, Director Rubber  
Mr. Mervyn Wijesinghe, Director Engineering  
Royal Netherlands Embassy

Mr. Jules Jongma, Counsellor  
Embassy of Italy

Mr. Alberto Bertoni  
German Technical Training Institute

Mr. Gottfried Marienfeld, Director  
(by telephone)

United Nations Development Programme

Mr. J.K. Robert England  
Resident Representative (in Vienna)

Mr. A.M.T. Gunawardana  
Assistant Resident Representative

Mr. Fredrick Abeyratne  
National Programme Officer (Palmyra project)

Ms. Hatice Pehlivan  
Programme Manager (Project DP/SRL/91/031)

United Nations Industrial Development Organization

Ms. Nicole Dewez  
Junior Professional Officer