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THE CURRENT AND PROSPECTIVE CONTRIBUTION OF WOMEN TO NEPAL'S INDUSTRIAL DEVELOPMENT*

Prepared by the

Regional and Country Studies Branch

Industrial Policy and Perspectives Division

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Preface

This study of the role of women in industrial development in Nepal is one of three country-level studies undertaken by UNIDO with financial support from the Netherlands Government as part of an ongoing effort to support and enhance women's contribution to the development of the manufacturing sector.

The immediate objectives of the present Nepal-study were:

(i) to assess the current role of women in the process of the country's industrial development;

(ii) to assess the implications for human resource development and in particular for women's participation in industry in the coming years on the basis of trend projection and the country's established industrial strategic goals and priorities, in particular as laid down in the Seventh Plan, as well as of emerging new challenges to and patterns of industralization;

(iii) to outline policies and measures conducive to enhancing the role of women in the framework of human resource development for industry;

(iv) to identify areas and key issues for bilateral and multilateral co-operation in this field.

Guidance as regards the scope, co-ordination and modalities of implementation of the study work was provided by a special Steering Committee under the chairmanship of the Secretary of the Ministry of Industry, Mr. R.R. Upadhaya. Mr. Indu Shamsher Thapa, Project Director, Ministry of Industry, responsible for Government co-ordination and inputs to the study was Member/Secretary of the Steering Committee. Other Members of the Steering Committee included senior officials of the Ministry of Industry and of other concerned government agencies and private sector bodies, such as

- National Planning Commission;
- Women Development Section, Ministry of Panchayat and Local Development;
- Directorate of Technical and Vocational Education, Ministry of Education;
- Department of Labour, Ministry of Labour and Social Welfare;
- Federation of Nepalese Chambers of Commerce and Industry;
- Nepal Women's Organization; and
- Women Service Co-ordination Committee, Social Services National Co-ordination Council.

The study was conducted and the report prepared by staff of the Regional and Country Studies Branch in co-operation with following consultants: Mr. Madhukar Shumshere J.B. Rana (team leader), in association with Ms. Greta M. Rana, Mr. Arjun Jung Shah, Mr. Deepak Thapa constituting the Nepal research group; and Ms. Jean Currie, Ms. Swarna Jayaweera and Mr. Paul Hoss

Valuable contributions to specific issues of the study were further made by Ms. Neeru Shrestha (researcher at the Centre for Economic Development and Administration - CEDA - at Tribhuvan University, Kathmandu) and Ms. Bina Pradhan (Centre for Women and Development, Kathmandu).

The co-operation of all institutions and individuals involved in carrying out this study is gratefully acknowledged. It is thanks to their keen interest and high dedication to the development issue addressed that this study has been possible.

It is hoped that the study will provide a valuable framework for informal discussion and analyses and thereby contribute to the policy-making in Nepal towards enhancing the role of and potential contribution of women to the country's industrial development, and that it will serve as an important basis for developing promotional and training programmes, for initiating and designing technical co-operation activities and for undertaking further in-depth studies on specific aspects of industrial policies.

A National Wrokshop on the Role of Women in the Industrial Development of Nepal was held in Kathmandu on 4 and 5 July 1988 to review and discuss the findings and proposals of the present study report. The Workshop was opened by the Minister of Industry and attended by some 40 senior officials at policy-making level from concerned Ministries and Government agencies, representatives of industry and representatives of women's organizations and projects. Special thanks go in this connexion to Mr. I.S. Thapa, Project Director, Ministry of Industry for the excellent organization of the Workshop.

The results and conclusions of the Workshop are gvien in the Addendum to this report (pages 126-136).

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Abbreviations

ACP	Association for Craft Producers
ADB	Asian Development Bank
ADBN	Agricultural Development Bank of Nepal
ARTEP	Asian Employment Programme (of ILO)
BPWC	Business and Professional Women's Club
CBS	Central Bureau of Statistics
CEDA	Centre for Economic Development and Administration, Tribhuvan University
CIDB	Cottage Industries Development Board
CSI/II	Cottage and Small Industries Project, phase II
CTA	Chief Technical Adviser
CWD	Centre for Women and Development
DCVI	Department of Cottage and Village Industries
EPV	Export Production Village
EPZ	Export processing zone
ESC	Export Service Centre
FNCCI	Federation of Nepalese Chambers of Commerce and Industry
GTZ	FRG Agency for Technical Co-operation (Gesellschaft für Technische Zusammenarbeit)
HMG	His Majesty's Government
HRS	Human Resources Section of the National Planning Commission
IBP	Intensive Banking Programme
IBRD	International Bank for Reconstruction and Development (World Bank)
IDA	International Development Association (of the World Bank)
IDS	Integrated Development System
IFAD	International Fund for Agricultural Development
IGP	Income Generation Programme
IHDP	Integrated Hill Development Project
ILO	International Labour Organization
INWID	Informal Network for Women in Development
ISC	Industrial Services Centre
MAN	Management Association of Nepal
NGO	Non-governmental organization
NIDC	Nepal Industrial Development Corporation
NPC	National Planning Commission
NWO	Nepal Women's Organization
PCRW	Production Credit for Rural Women
SAARC	South Asian Association for Regional Co-operation
SATA	Swiss Association for Technical Assistance
SBPP	Small Business Promotion Project
SFDP	Small Farmers Development Programme
SSI	Small-scale industries
SSNCC	Social Services National Co-ordination Council
TPC	Trade Promotion Centre
TRUGA	Training for Rural Gainful Activities
UNDP	United Nations Develoment Programme
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
WDC	Women Development Centre
WDS	Women Development Section of the Ministry of Panchayat and Local Development
WEAN	Women Entrepreneurs Association of Nepal
WSCC	Women Service Co-ordination Committee
WTC	Women's Training Centre

Currency equivalent (as of 31 July 1988)

Currency unit = Nepalese Rupees (Rs.)
US $1.00 = Rs.23.6

Fiscal year

HMG/Financial institutions : 16 July - 15 July.

Executive summary

This study assesses the situation of women and their probable and potential future role in Nepal's manufacturing sector, and suggests measures to be taken to strengthen this role.

The study starts by giving an overview of industrial development and human resource planning in Nepal. The share of manufacturing in GDP was 5 per cent in 1985 which is considerably lower than in most other countries in South Asia. Moreover, only a small part of the manufacturing labour force works in the formal sector. While well over one million persons are thought to work in cottage industries, predominantly located in rural areas, the formal sector manufacturing sector employed only some 110,000 persons in 1984/85.

A survey of structural change in Nepalese manufacturing shows that while the food processing industries still dominate the sector, textile/garments, has become a fast grower and that the foundations of modern industries such as plastics, chemicals and pharmaceuticals are now being laid. The sector mainly produces for the domestic market; most of the cottage industries produce only for own household or local consumption. The sector's export share in GDP is small, fluctuating around 5 per cent of GDP; textiles/garments (including carpets) constitute an important export category. Imports consist to a large extent of manufacturing inputs and capital goods, reflecting the country's weak raw materials and manufacturing base. Government policies attempt to strengthen this base and to increase manufacturing exports; recent policies also show an awareness of the essential role of human resource development for the further growth of the sector.

A set of projections made for the main industrial subsectors indicate a possible total formal sector manufacturing employment in 1990 of about 180,000 persons (± 20 per cent). By 1995 the manufacturing employment might be of the order of 250,000 persons. Concentration of manufacturing on satisfying basic needs - food, clothing and shelter - would suggest particular expansion of light industry.

Although overall participation rates of women in the Nepalese economy are high, reflecting the rural character of economic activities, their share in the manufacturing labour force is smaller than in most other South and Southeast Asian countries, amounting to only 11.8 per cent in 1981/82.

In the manufacturing sector, female employment is predominantly found in the textile and food industries. Even in these industries, however, women are underrepresented when compared to other countries. When looking at the skill and professional levels, it becomes clear that the great majority of women only do unskilled work; those working at higher professional levels are often involved in work that does not require industrial skills (secretaries, etc). Both female participation in manufacturing and in education, however, have shown faster growth rates than those for men in recent years.

In the trend projection used, textile and wearing apparel industries will clearly take over from food and allied industries as the major employer of women, with more than half of all female employment. In 1981/82 both industries employed approximately the same number of women. There may be a

more limited growth in respect of women's employment in other branches, and a diminishing share in metal products (which employs few women altogether).

The branch trend analysis of prospective growth and on women employment potentials does not take into account possible effects of measures (e.g. in the field of training) or policy interventions which might be undertaken towards a desirable diversification of female employment.[1/]

Notwithstanding such prospective diversification it would seem clear that for female employment, the textiles, garments and carpet industries hold important growth prospects. Such evidence as exists, however, indicates that the growth would be almost wholly in semi- and unskilled employment. A diversification of women employment should be aimed at, in order to avoid misutilization of female resources and their potential role in the industrial development of the country.

On the basis of the growth projections of key manufacturing subsectors referred to above [reflecting the planned focus of manufacturing on satisfying basic needs and on export-oriented industries which suggests an expansion of the light industries] and the prevailing trends in female participation among the branches it could be reasonable to expect the proportion of women to rise significantly, say, from presently about 13 per cent to 18 per cent by 1995. In absolute figures, that would mean an increase of the female labour force in (formal sector) manufacturing from the present about 15,800 to about 45,000 persons, (out of a projected total manufacturing labour force of 250,000 persons).

Field surveys of a sample of industries, carried out as part of the present study, confirmed this general picture; it was also shown that female employees had higher than average education, but little training in industrial skills - an indication of the poor matching of education and training on the one hand and the skill needs and career opportunities in industry on the other. The field surveys also showed that other constraints to stronger participation of women in formal manufacturing are cultural barriers, restrictive legislation (from the point of view of employers) or absence/non-enforcement of legislation/measures with regard to female employment (from the point of view of employees). The various general problems of manufacturing (such as raw material shortages) also had a negative influence on female participation.

In the informal sector, women play a much more conspicuous role.[2/] Although the nature of the sector precludes the compilation of detailed

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1/ In the later part of the study a number of suggestions are made aimed at increased female participation, not only in overall manufacturing employment, but also in branches and at skill levels where so far few women have been employed. In particular, the suggestions are consistent with the premise that such female employment increase would essentially result from additional efforts by way of increased production (or service activities inter-linked with manufacturing).

2/ With regard to female participation in the informal sector the main source of data indicating male and female ratios is a 1972/73 sample survey. The survey suggests that out of an estimated total of 1,040,000 informal sector workers approximately 430,000 were female.

statistics and although manufacturing in most cases is combined with agricultural and domestic work, it is clear that in such activities as food processing and textiles production, women not only dominate the labour force, but they are far more often involved in entrepreneurial and managerial activities as well. Many of the activities are directly geared to household consumption, but among the more developed cottage industries, exporters, such as the carpet manufacturers, may be found which employ a high percentage of women.

A field survey of a sample of cottage industries in urbanized areas revealed that slightly over one-half of their labour force consisted of women. Family labour, though found side-by-side with wage labour, was common. In the urbanized areas, full-time cottage manufacturing was found to be more common than the part-time manufacturing which characterizes the rural areas.

Major constraints of the cottage industries were lack of working capital (investments tend to be small, and therefore investment capital was no major constraint), transport/marketing costs and competition from imports and/or formal sector enterprises. Complicated Government legislation and procedures were also mentioned, but the present industrial policies aim at simplifying these with the specific objective of stimulating informal manufacturing, which represents a major source of livelihood. The removal of the constraints, however, is by itself not likely to lead to rapid growth in the sector, as more managerial and technical skills would be needed to enhance the productivity of the sector and to capture growth markets such as tourism.

In the various support services and Government agencies involved in industrial development, female employment was found to be low as well. Few women are employed at key posts, although the overall job status of women is better than in manufacturing; there would also appear to be reasonable career prospects at the middle levels. Women with industry-related higher-level skills are uncommon in these institutions as well.

The study puts forward a number of suggestions for policies and measures with direct or indirect bearing on the envisaged development of the country's industry (and the prospective contribution of women related thereto). Thus it is suggested that

- as part of the present policy of stimulating the use of domestic resources, a systematic assessment be made of inter-sectoral and inter/intra-industry linkages;

- a R and D programme be pursued to modify and modernize some of the traditional (crafts) production of items needed for domestic consumption, such as certain textile, basketware, leather and wood items, candles, etc. coupled with an appropriate marketing system, in the overall context of the long-term policy of basic needs fulfilment by the year 2000;

- measures be taken aimed at improvement of quality control and product standardization, especially for export products, e.g. by increasing the scope for activities of the Bureau of Standards;

- research priorities (both technical and marketing) be established for cottage industry products with foreign market potential, and that special support be given to cottage industries applying results of such research;

- particular attention in this context should be given to methods (or types of products) which would not require very large capacities and promotion should be attempted regarding selected specific items, requiring, for instance, extra-wide looms or special colour inputs - a promising area being internationally marketable items using natural colours;

- educational curriculae be more closely adapted to the needs of the economy to make a more efficient use of the limited resources; strengthened co-ordination of various technical/managerial training programmes is needed for the same purpose.

It is further recommended that in implementing the new 'Industrial Policy' attention be given to the design and development of industry subsector-specific policies and support programmes, with particular attention to related human resource development.

The study also presents a number of suggestions for stimulating female participation. Overall improvements of the performance of the manufacturing sector would be essential to create more opportunities for women. More efforts will also have to be made to improve women's general educational levels. Further, such special programmes as are designed for women should be linked more intensively to general industrial development programmes in order to increase their efficiency; they should, moreover, be formulated in such a way that the overall development benefits are not reduced.

In the formal sector, stimuli could be provided to facilitate female employment. These could, among others, include Government support to day-care centres and special support to industry in subsectors so far employing few women. Stricter enforcement of equal opportunity legislation may also be needed. The possible development of a Kathmandu EPZ or 'bonded warehouse' activities would provide opportunities to create new industries catering also for the tourist trade in high-value, skill-intensive products that are a departure from the normal type of EPZ production. This type of production is likely to be of special relevance to women employment.

In the informal sector, there is considerable potential for industries employing a high percentage of women (e.g. textiles) to more extensively tap tourist and export markets as well. Here, the Sri Lankan export production village experiment, which links a group of cottage industry producers, might be worth testing for its viability in Nepal. Female self-employment would, among others, also benefit from the exploration of new avenues for credit provision and marketing. Entrepreneurship, management and technical skill development would have to receive extra boosts as well.

The role of women in industrial support institutions could be strengthened by a more active Government role in recruiting and training women for positions in its various key agencies for industrial development. A

stronger presence of women in these agencies is also likely to enhance the efficiency of support to women in manufacturing. Female marketing and credit co-operatives, for which much groundwork has already been done, represent another opportunity in this field. In support services as well as in formal manufacturing, finally, an important positive impact may be expected from presenting female role models.

Strengthening the role of women in industry will in general depend on their more intensive participation in technical education and training. Linking these to actual productive activities would provide women with a stepping stone to enter the manufacturing sector. International co-operation could take the form of increasing the role in assistance projects, better co-ordination of such projects, monitoring (and providing information on) international developments relative to female employment and regional co-operation on female manufacturing employment issues.

More specifically, an effective linking of industry-related programmes and projects for women to overall industry sector policies is much needed. In general, it may be said that the plethora of small and large projects that have been implemented in recent years, and, in the case of women's programmes, during the UN Decade for Women, has given rise to concern over the lack of effectiveness of ad hoc projects which function in isolation from mainstream industrial development. It has been observed that resources have been spread too thinly and such projects terminated without ensuring continuity or transfer to local management. Different projects are reported to have been set up either by parallel agencies within the same Ministry or institution, or within special structures that are not eventually incorporated in the main institution. In order to avoid such situations it is necessary to examine strategies for promoting co-ordination and co-operation between programmes.

This does not mean, however, that it is necessarily desirable to have a single, exclusive or centralized authority or a uniform strategy in industry as initiative and diversity needs to be encouraged. The low status of women in industry necessitates a multi-faceted approach to channelling inputs and promoting their participation. Moreover, the Government and NGOs (both statuatory and private sector non-profit organizations) have a complementary role to play in meeting the needs of women in industry.

Within this framework of diversity it is yet possible to minimize waste of resources and to make optimal use of inputs to programmes by evolving mechanisms to achieve some measure of co-ordination and co-operation. The following measures may be considered:

(i) The establishment of an official policy of commitment to increase the participation of women in industry, coupled with the provision of incentives to entrepreneurs to facilitate such industrial development and the support from the banking system will ensure a common national framework.

(ii) While flexibility needs to be encouraged in programme development, all programmes should have links at village and district level with the relevant local/district planning and implementing units so that infrastructural support may be available after external assistance is withdrawn and women's programmes are integrated in mainstream development programmes and not marginalized as peripheral activities.

(iii) It should be possible for all projects to have access to or contribute to national/regional/district training programmes and technological support services in order to ensure maximum use of available resources and facilities and to extend the outreach of these facilities. E.g. the new National Productivity Council could give special attention to industries managed by women or with a high female employment share.

(iv) In this context it is desirable to establish, eventually, resource centres in all regions and districts (e.g. through the Cottage and Village Industries Department, Cottage and Industry Development Board, Industrial Services Centre, Integrated Hill Development Projects) so that it will be possible to co-ordinate the use of inputs by all programmes in the region/district.

(v) Linkages need to be established between

(a) industries in the informal and formal sectors;

(b) small and large industries through subcontracting and through marketing links; and

(c) public and private sector industries by sharing technical information and skills.

(vi) The informal networking of those involved in women's programmes, INWID, needs to be continued and strengthened in order to facilitate interchange of experience and mutual support.

The study ends with a series of concrete project proposals. They include

- strengthening of formal sector employment of women in Kathmandu's tourism/export-oriented industries;

- an export production village pilot project in Kathmandu Valley, concentrating on textiles;

- a series of rural village self-employment schemes, covering both food processing and textile industries; and

- pilot projects for production-related female entrepreneurs training.

Finally, the proposal (in Annex 4) for an analytical framework for industry subsector assessments may be noted. Such assessments could be useful particularly in designing subsector-specific policies and support programmes with regard to human resource development.

1. Introduction

Industrialization has been a cornerstone for development policies in many developing countries. However, plans and policies have largely neglected the fact that industrial transformation implies transformation of human resources as well. This process constitutes not only a challenge to the role of women but it also provides new prospects for enhancing their position in the society and in the economy. Distinct policies are needed to seize these opportunities in the transition from traditional to new manufacturing activities and to ensure that women are provided with the skills required to fully participate in this process. Furthermore, it is important to monitor corresponding developments and to create full awareness of this issue among policy-makers at all levels.

To this end UNIDO is assisting various countries in carrying out the required analyses and projects which can contribute to forming a basis for national policies to be designed. Fuller awareness of the current and potential participation of women in industry and the establishment of reliable data on the subject may be expected to significantly help countries in making full use of their human resources and in designing appropriate strategies for improving the integration and participation of women in industry.

In Nepal, human resource development is a key issue. There is an urgent need to increase general literacy and technical and managerial skill levels of the population which is at present growing at a rate of 2.6 per cent per annum. A skilled labour force is essential if the economy is to keep pace with the fast growth of the population and to provide higher living standards in the future.

Although Nepalese women play a key role in the rural sector of the economy, their efforts are generally not recorded or rewarded, and their contribution to modern economic development has been marginal. The current Seventh Development Plan shows a clear awareness of the need to enhance the role of women in economic activities, and a wide range of projects is being carried out in that context.

The present document assesses the situation of women, their probable and potential future role in the manufacturing sector and measures that could be taken to strengthen that role. The structure of the report is as follows: Following the brief introductory Chapter 1, Chapter 2 gives an overview both of industrial and human resource development in Nepal, providing a setting for Chapter 3 which explores the role of women in both formal sector manufacturing and in the informal sector. The latter Chapter in part builds on field surveys carried out during 1987. Chapter 4, finally, describes prospects and possible support measures. In the Annex part, a number of detailed support project proposals may be found. Unless otherwise indicated, tables have been taken from the field research report "Role of women in Nepal's industrial development: Status, constraints, opportunities and prospects" which was prepared by the Nepal research group within the framework of the present project.

2. Industrial development and human resource planning in Nepal

2.1 Manufacturing and the role of women: Nepal in the international context

The share of manufacturing to GDP in Nepal is far lower than in other countries in South Asia (except for Bhutan), being at around 5 per cent of GDP. In Bangladesh, which is also a least developed country, the proportion of manufacturing to GDP is 8 per cent. In India, Pakistan and Sri Lanka almost a fifth of all GDP is derived from manufacturing (see Table 2.1).

Table 2.1 Comparison of indicators of selected Asian countries

	Population mid-1985 (millions)	Area (thousands of sq.km.)	GNP per capita 1985 US $	GNP per capita Average annual growth rate 1965-85 (per cent)	Life expectancy at birth 1985 (years)	Manufacturing share of GDP 1985 (per cent)
Nepal	16.5	141	160	0.1	47	5.0
Bangladesh	100.6	144	150	0.4	50	8.0
Burma	36.9	677	190	2.4	59	10.0
India	765.1	3,288	270	1.7	56	17.0
Pakistan	96.2	804	380	2.6	51	20.0
Sri Lanka	15.8	66	380	2.9	70	15.0

Source: World Bank - World Development Report 1987.

In addition to the low proportion of manufacturing to GDP a further feature of Nepalese manufacturing is the significance of the cottage manufacturing sector. Around 30 per cent of all manufacturing value added is believed to be generated by cottage industries - a proportion which has changed relatively little over the past decade. Comparative information at an international level on the cottage industry is almost always incomplete, but its importance in Nepal is almost certainly higher than in most developing countries in the region and is partly a reflection of the relatively isolated nature of many rural communities which has permitted traditional small-scale crafts to survive. A 1977/78 survey by the Industrial Services Centre indicated that, at that time, around 1,215,000 people were employed in some 750,000 cottage-sized units.[1/] In terms of number of units and employment the most important cottage sectors are agro-based (oil and cereal mills) but in terms of value added the most important cottage industries are in the field of textiles: jute and cotton weaving, and carpet making.

1/ As noted later (in Table 2.4) about 113,000 persons were estimated to be employed in Nepal's organized manufacturing in 1984/85.

The overall economic participation rate for women in Nepal is higher than in most of the countries in the region (see Table 2.2). It is a great deal higher than in Bangladesh and Pakistan, and significantly higher than in India and Sri Lanka. It is considerably lower than in developed countries such as Japan. The relatively high participation rate is a reflection of the rural nature of the Nepalese economy. Generally, the participation rates tend to be higher in rural communities, where women play an important role in agricultural production.

Table 2.2. Economic activity rate[a/] and paid employment in manufacturing

Country	Economic activity rate			Paid employment in manufacturing. Women in % of total manufacturing employment	
	Year	Male	Female	Year	Per cent
Nepal	1980	56.4	32.5	1982	11.8
Sri Lanka	1981	64.7	23.1	1984	37.8
India	1981	52.7	19.8	1983	9.6
Pakistan	1985	51.5	7.2		N.A.
Bangladesh	1983-84	53.5	5.4		N.A.
Thailand	1982	57.5	50.6	1979	44.0
Malaysia	1980	49.6	25.3	1976	45.0
Singapore	1985	59.8	34.3	1979	46.0
Indonesia	1982	57.9	23.2	1976	47.0
Philippines	1980	60.1	28.0	1976	47.0
China	1982	55.7	46.4	1983	40.3
Rep. of Korea	1983	46.3	29.3	1984	42.2
Japan	1985	60.5	38.6	1984	39.6

Source: Nepal, 1980 Census; Shrestha 1985; draft UNIDO study on female employment in industry in Sri Lanka.

[a/] Economic activity rate: $\frac{\text{Total economically active female population}}{\text{Total female population of all ages}}$

Only limited information on the role of women is the formal industrial sector of Nepal is available. In the 1981/82 manufacturing census 12 per cent of the economically active labour force in the sector were women. In proportionate terms this was an improvement over the 1976/77 figure when only 11 per cent of the manufacturing labour force were women, but this must be viewed against the background of a very small manufacturing sector labour force. The contribution of women to the unregistered cottage industry sector is, however, considerably higher than in the formal sector.

The contribution of women to manufacturing in Nepal is slightly higher than in India but far below that of most other Asian economies. In Sri Lanka 38 per cent of the manufacturing labour force are women, and in Indonesia and the Philippines over 40 per cent.

In most economies there is some concentration of employment of women in a few light industries and the total employment of women in manufacturing is partly a reflection of the importance of these sectors. For example, in Hong Kong 50 per cent of the industrial labour force were women in 1982, but 85 per cent of all female employment was in six light industrial areas (food and beverages, textiles, garments, chemicals, leather, plastics, electrical machinery and apparatus). A feature of Nepal, however, is the relatively modest proportion of women even in those industries which elsewhere are largely female dominated; in certain industries, immigrant male labour from India is used rather than female domestic labour. Thus, the study has indicated that only one third of those employed in garments and textiles are women - in the Republic of Korea, Hong Kong and the Philippines the proportions for garments alone are 76 per cent, 69 per cent and 65 per cent respectively. Again, in leather industries, which in the Republic of Korea and Hong Kong (though not in the Philippines) are significant employers of women, only 14 per cent of the labour force in Nepal are women.

Where women are employed in industry in Nepal they would appear to be employed almost exclusively in the less skilled work. In most Asian countries, although by far the larger proportion of the women employed in manufacturing are manual workers, women are usually also employed in significant numbers at the higher levels. The proportion of women in professional and technical positions in Nepal is, however, negligible (see Table 2.3).

Table 2.3. Professional and technical workers in industry - shares of total female labour force in selected Asian countries
(per cent)

Nepal	(1981)	0.45
Bangladesh	(1983)	1.28
Indonesia	(1981)	4.08
Pakistan	(1985)	2.77
Sri Lanka	(1981)	3.19
Thailand	(1982)	0.84

Source: ILO-Yearbook of Labour Statistics 1986

One explanation sometimes given of the low participation of women in Nepal is the poor education attainment of women in Nepal. Basic literacy is considered desirable for most modern sector jobs, but the educational attainment needed for operative work depends upon task and upon the industry. It is true that elsewhere in Asia employers find that workers require at least ten years schooling to absorb the intricacies of even simple assembly work in electronics. However, the educational requirement for garment making and textiles is lower, and the use of women of secondary and even higher educational background for these tasks (for example in Sri Lanka) is, on the contrary, cited as an indication of the lack of opportunities elsewhere in the economy.

Cultural image, the small size and slow growth of the manufacturing sector and the ready availability of male labour in urban areas are probably the principal constraints to the employment of women in industry in Nepal.

With regard to the cultural factors, it has been found in other countries that where investors from overseas, less inhibited by these factors, establish factories, the proportion of women employed rises sharply.

One problem related to the growth of the modern sector (and one to which Nepal needs to be alert) is the possibly adverse impact on traditional craft activities in areas where the crafts and modern products are directly competing. In Sri Lanka, for instance, the number of women employed in textile manufacture fell by 30,000 between 1971 and 1981 with the virtual collapse of the traditional handloom industry. This had been the principal source of income generating activities for women in rural areas and it could not compete with sophisticated modern power mills. Consequently, despite the growth of overseas investment in garment-making total female employment in manufacturing in Sri Lanka fell between 1971-1981. Technological improvements and product reservation schemes have been used in various countries to strengthen the position of traditional industries; these experiences should be carefully analyzed to arrive at proper measures for women in the informal sector.

Before attempts can be made to penetrate the world market with sophisticated consumer goods such as electronics, a number of conditions would have to be fulfilled: better local infrastructure, better connections to world markets (Nepal's landlocked portion is a definite disadvantage), basic education for a far larger part of the (female) workforce. The presence of potential low-wage competitors in the region for which these basic conditions are better fulfilled must be taken into account, as well as that of a world market which shows few signs of expansion. Some further limiting aspects affecting such strategy will have to be taken into account, such as the fact that, firstly, there will in all likelihood be few linkages or spillover effects (including improvements in the skill levels of the labour force) of such specialized production work and, secondly, it may lead to increased population growth in urban centres which are as yet ill-equipped to deal with such growth. In the Nepalese context, it seems essential to stimulate export-oriented industries which are less dependent on a highly developed physical and social infrastructure, and which have stronger ties to local manufacturing, ensuring spin-offs such as employment creation in dispersed locations.

2.2 Production and employment structure in the formal industry sector

With a 1985 per capita income of US $160, Nepal is among the poorest countries in the world. Some 90 per cent of the economically active population works in agriculture, which accounted for 60 per cent of GDP in 1985. The next most important sector was services, with approximately 25 per cent of GDP. The manufacturing sector contributed for 5 per cent of GDP in 1985.

The formal industry sector is dominated by (i) food and allied products and (ii) drinks and tobacco. These two industrial groups together accounted for an estimated 75.7 per cent of value added and 63.2 per cent of employment in 1984/85 (see Table 2.4). Within the food products sector, grain and oil milling dominated. The third important subsector is textiles and wearing apparel. As Table 2.4 shows, its 1984/85 value added was almost as high as that of the food and allied products sector, and it is a more important

Table 2.4. Structure and growth of organized manufacturing, Nepal, 1965/66 - 1984/85
(Rp. 1,000,000, at 1970/71 prices, % shares)

			Food and allied	Drinks and tobacco	Textile wearing apparel	Wood/ paper/ printing	Plastics/ chemical/ pharmaceuticals	Non-metallic minerals	Metallic products	Activities not elsewhere classified	Total
1965/66	Value added	Rp.million	97.8	7.8	12.3	8.0	n.a.	5.3	2.1	-	133.3
	Employment		5,734	835	4,573	1,726	43	1,466	615	-	14,992
	Value added	per cent	73.4	5.8	9.1	6.0	-	4.0	1.5	-	100.0
	Employment		38.2	5.7	30.5	11.5	0.2	9.7	4.1	-	100.0
1972/73	Value added	Rp.million	134.2	13.5	11.7	22.9	0.2	28.4	7.2	36.4	254.4
	Employment		22,836	5,802	6,585	3,004	124	5,300	1,246	2,577	47,534
	Value added	per cent	52.8	5.3	4.6	9.0	-	11.2	2.8	14.3	100.0
	Employment		48.0	12.3	13.8	6.3	0.2	11.1	2.6	5.4	100.0
1976/77	Value added	Rp.million	171.9	14.4	33.7	22.2	3.2	16.9	5.53	52.2	319.9
	Employment		20,835	6,887	9,158	5,971	743	8,081	1,389	7,340	60,404
	Value added	per cent	54.2	4.5	10.6	6.9	1.0	4.4	1.7	16.5	
	Employment		35.3	11.6	14.1	10.1	1.2	12.8	2.3	12.4	
1981/82	Value added	Rp.million	360.0	169.9	87.5	70.6	22.9	16.0	19.4	14.2	760.5
	Employment		25,463	11,087	13,911	7,267	832	16,634	3,843	1,143	80,180
	Value added	per cent	47.3	22.3	11.5	9.3	3.0	2.1	2.5	2.0	
	Employment		31.8	13.8	13.8	9.1	1.0	20.7	4.8	5.1	
1984/85[a]	Value added	Rp.million	152.9	185.4	142.3	47.5	38.2	24.6	25.1	9.8	625.9
	Employment		34,406	14,751	22,976	14,536	3,955	17,517	4,286	551	112,978
	Value added	per cent	24.4	29.6	22.7	7.5	6.1	3.9	4.0	1.7	
	Employment		30.2	12.9	20.9	12.7	3.5	15.3	4.2	1.0	

Source: Industrial Services Centre; see Annex Table 1 for data on specific industries/product groups.

[a] Estimates.

employer than drinks and tobacco. The remaining subsectors together accounted for less value added than the textiles subsector by itself. The wood and allied products and non-metallic minerals industries are major employers, but their contribution to value added is small. Modern industries such as plastics and chemicals and metal products are as yet neither major employers nor important contributors to value added.

The overwhelming share of industrial activity is urban-based: in 1981/82 71 per cent of all manufacturing establishments were located in towns. Their share of value-added and employment was 80 per cent and 83 per cent, respectively.

Of the total number of registered manufacturing establishments (4,903 in 1981/82), 94 per cent had a fixed capital investment of not more than Rs. 500,000 and were thus in the small-scale category. This category in turn accounted for 60 per cent of total employment, 59 per cent of total male employment and 64 per cent of total female employment (see Table 2.5). According to the 1981/82 survey, total formal manufacturing employment was 81,050; by 1986, the figure may have been around 96,000.

Table 2.5. Size of establishments by investment and employment, 1981/82

Fixed capital investment (in million Rp.)	No. of establish-ments	Per cent	No. of employees					
			Total	Per cent	Male	Per cent	Female	Per cent
0.0 - 0.5	4,628	94.4	48,262	59.5	42,069	59.0	6,193	63.8
0.6 - 0.8	96	2.0	4,618	5.7	4,166	5.8	452	4.7
0.9 - 2.0	95	1.9	6,415	7.9	5,430	7.6	985	10.1
2.1 - 10.00	69	1.2	12,007	14.8	10,708	15.0	1,299	13.4
10 and over	24	0.5	9,748	12.0	8,969	12.6	779	8.1
Total	4,903	-	81,050	100.0	71,342	88.0	9,708	12.0

Source: HMG/ADB, Nepal Industrial Sector Study, 1985.

Over the past 20 years, a number of structural changes have affected the pattern of Nepal's industry. The most remarkable change is the comparative decline in the relative role of the food and allied subsector. Its value added and employment shares fell from 73.4 per cent in 1966/67 to 47.3 per cent in 1981/82. Employment levels fell from 38.2 per cent of total employment in 1965/66 to 31.8 per cent in 1981/82. The drinks and tobacco subsector has, however, gained in importance between 1965/66 and 1981/82. Whereas the share of value added and employment was 5.8 per cent and 5.7 per cent, respectively, in 1965/66 it rose to 22.3 per cent and 13.8 per cent in 1981/82. The textiles sectors increased its share in value added between 1965/66 and 1981/82, although it did not perform too well on this indicators at the intervening points of measurements; its share in employment decreased (see Table 2.4).

The most recent, 1984/85 data, though not based on a nationwide census, indicate increasingly rapid structural change:

(i) there has been a further decline in the share of the food and allied subsector;

(ii) rapid gains are noticed in the textile and wearing apparel subsector (a doubling of the value added share compared with 1981/82);

(iii) clear gains in the plastics subsector, although its impact on industry as a whole is still limited.

The food and allied, drink and tobacco, and textile and wearing apparel products together still basically comprise the present industrial structure: in 1984/85, their share of of value added was estimated to be 76.7 per cent and 63.2 per cent of employment.

The long-term annual rate of industrial output growth, in constant 1970/71 prices, was 5 per cent between 1965/66 and 1984/85. The mid-term trend (1972/73-1984/85) of real output is 4.2 per cent. No significant difference in real output performance is thus noted between the long-term and mid-term trends.

The long-term average annual rate of industrial value added growth, in constant 1970/71 prices is 9 per cent as compared to 8 per cent in the mid-term. Similarly, the long-term average annual rate of employment growth is higher than the mid-term growth, being 12.5 per cent and 7.5 per cent respectively for 1965/66-1984/85 and 1972/73-1984/85. Capacity utilization shows a slow upward trend (see Annex Table 2), but the overall utilization rate was only 53.2 per cent in 1984/85.

Major bottlenecks which must be cleared if manufacturing performance is to be improved are raw material shortages, power supply problems, shortage of qualified manpower and marketing problems partly resulting from competition of imports from India. Shortage of foreign exchange is also a problem; this is in part related to the raw material constraint, as many inputs have to be imported in the absence of local minerals and the limited development of the country's agricultural sector. Raw material costs have come to account for some 70 per cent of the value of output in a typical Nepalese industry; wages on average accounting for only 10 per cent. It is hoped to raise overall capacity utilization to 70 per cent during the Seventh Plan, among others through improved raw material supplies (resulting partly from measures stimulating agriculture), expenditure on power infrastructure and an increased availability of qualified managers and skilled workers.

More specific subsectoral trends (see Table 2.4 and Annex Table 1) were as follows:

Food and allied: Below average long-term performance is noted in respect of real output expansion and value added, suggesting chronic deficiencies in the subsector, especially the milling industry. Growth in employment in the grain and oil milling industry is not accompanied by growth of the other variables. The sugar and khandsari industry has not performed well recently. Bakery and confectionery and tea processing are relatively dynamic industries within the subsector.

Drinks and tobacco: This subector has shown rapid overall growth. The performance of the beer and soft drinks and cigarette and bidi industries has been striking.

Textile and wearing apparel: Above average long-term annual growth of real output 10 per cent per year is registered by this sector. The carpet and knitwear industry has even achieved annual average real growth rates of 33 per cent and 35 per cent respectively. These two industries (and also the footwear and tanning industry) hold great promise not only because of their growth in real output but also because of their dynamic growth rates in value added and employment. By 1984/85 this subsector had surpassed the drinks and tobacco sector with regard to gross output and employment.

Wood, paper and printing: This sector is notable for its relatively large employment generation capacity despite its low gross output and even lower value added. The wooden furniture industry plays a dominant role. The near stagnation in employment in the parquet industries is noteworthy; with proper raw material supply, this industry would have a good employment generating potential. However, the chronic raw material problems as a consequence of forest depletion places a severe constraint on this sector's performance and investment climate as a whole.

Plastic, chemicals and pharmaceuticals: Above average performance especially found in the plastic, PVC and chemicals industry. The subsectoral long-term growth rates of 23 per cent for real output, 35 per cent for value added and 22 per cent for employment are the highest in industry.

Non-metallic mineral products: No remarkable long-term performance is registered by this subsector. The brick and tile industry showed little expansion over the mid-term (1972/73-1984/85). The cement industry also showed little growth. The subsector is a major employer, but growth is very much dependent on the overall expansion of the economy.

Metallic products: This sector is dominated by small industrialists, except for iron and steel goods. Individual industries have recorded above average long-term performance, due mainly to the market for metal utensils and products, and for fabrication and repair industries. The larger part of the output in this subsector, however, originates in the steel and iron industry.

Through the years Nepalese investors seem to have, on the whole, preferred the faster returns on investment in the services sector (trade, tourism) to long-term investment in the manufacturing sector; profits made within the sector are often reinvested elsewhere. In this situation the Government has established industrial enterprises for the production of goods deemed essential for the national economy. In 1981/82, Government-owned industries accounted for 23 per cent of manufacturing employment, and approximately one-fifth of the sector's contribution to GDP. The number of Government-owned enterprises was 73, concentrated in the textiles, food and drinks and non-metallic minerals branches. Outright foreign ownership is uncommon, but many of the larger industrial enterprises in Nepal are joint ventures. Foreign investment (mainly Indian) was highest in the textile branch, where it accounted for 28 per cent of total investment; it was followed by investment in the wood products and non-metallic mineral branches.

While Government ownership is to be reduced under the Seventh Plan, private domestic and foreign investment is to be encouraged. Simplification of administrative procedures, facilitating raw material supply, improvements in industrial infrastructure and the creation of a Foreign Investment Promotion Division in the Ministry of Industry are among the recent measures to attract investment. The creation of an export processing zone near Kathmandu airport is being discussed.

2.3 Manufacturing sector growth scenario

On basis of actual industrial growth recorded during the period 1965/66-1984/85 (for 14 selected products) and the period 1972/73-1984/85 (for 28 products; most of the additional products being high growth items not produced in the country in any significant amounts before), a set of projections for the various industrial subsectors in respect of output, value added and employment has been made for 1990, as shown in Table 2.6.

Table 2.6. Projections for 1990 for major industrial subsectors

Industry subsector	Output (Rs. million)		Value added (Rs. million)		Employment	
	Max.	Min.	Max.	Min.	Max.	Min.
Food and allied products	1,000	891	163	154	60,073	41,552
Drinks and tobacco products	718	458	374	177	26,706	20,747
Textile and wearing apparel	1,381	420	522	175	58,412	22,812
Wood, paper and printing	239	203	67	62	8,823	2,744
Plastics, chemicals & pharmaceuticals	248	26	77	-	30,367	23,867
Non-metallic mineral products	73	54	27	25	31,230	27,283
Metallic products	94	56	36	10	5,253	3,749
Total	3,753	2,100	1,266	603	220,864	142,754

Source: UNIDO (Madhukar Rana, Deepak Thapa), Role of Women in Nepal's Industrial Development: Status, Constraints, Opportunities and Prospects, Volume I, November 1987.

Despite limitations to the technique of trends analysis used here it may be concluded that:

(i) Major industries where mini-max variances are small, can be said to have 'matured' and past trends are reliable indicators of likely developments. The food and allied, wood, paper and printing will most probably not gain significantly in any of the indicators (even with forceful Government intervention) as raw material supply is the constraining factor;

(ii) major industries where mini-max variances are wide would indicate large potential for further growth, especially where the employment component is high (e.g. textile and wearing apparel);

(iii) less important industries, where mini-max variances are not large yet from the employment perspective, present good prospects (e.g. non-metallic mineral products, which have natural protection from foreign competition owing to their bulkiness).

As for potential development beyond 1990, while it would be difficult to provide any more precise demand forecasts of employment in manufacturing, it might be useful to give some indication of possible dimensions. Should the country's GDP grow by some 4 per cent per annum from 1985-1995 (the Seventh Plan target 1985-90 being 4.5 per cent per annum) with manufacturing growing significantly faster (as envisaged during the Seventh Plan period), then the manufacturing sector might by 1995 account for some 8 per cent of GDP and a (formal sector) employment of the order of 250,000 persons (against about 90,000 in 1983) allowing also for some small increase in labour productivity. Concentration of manufacturing on satisfying basic needs - food, clothing and shelter - would suggest the expansion of light industry, in which, traditionally, women can be, and are, employed. The growth of export-oriented industry is likely, again, to be concentrated on the type of industry in which women are usually employed.

2.4 The informal manufacturing sector

In this study informal manufacturing refers to very small unregistered production entities which mostly operate in households, and are therefore largely out of reach of the Government, statistically and administratively. This sector would be further characterized as follows:

(i) It is primarily involved in low-grade processing;

(ii) A major part of the produce is used for self-consumption, though a portion may be sold in the market;

(iii) Operations are generally restricted to off-farm hours and hence employment is part time (usually 3-4 months a year, 2-4 hours daily);

(iv) Units are widely scattered but predominant in the hills and mountains, and with major clusters in urban areas. The terai belt is of less importance. Table 2.7 shows the regional distribution by type of industry.

According to the sample survey results of 1977/76, the latest large-scale survey of the sector available, only a very small portion of the 750,000 cottage industries were registered. The survey showed that the major share of output and value added was accounted for by the cotton and woollen textiles (41 per cent and 50 per cent respectively); for employment the agro-based industries were the most important (42 per cent). Four subsectors (agro-based, forest-based, textile and metallic products) cover about 97 per cent of total output, 96 per cent of value added and 90 per cent of employment (see Table 2.8). Such data as is available shows little structural change in the sector.

Table 2.7. Regional distribution of cottage industries

Area	Organized activities	Household activities
Terai	Grain milling, bakery, bidi cigarettes, bricks, sawmilling, furniture	Pottery, blacksmithy, carpentry, hosiery, textiles
Hills	Grain milling, bakery, furniture, garments, textile, hosiery, bricks, carpets	Radipakhi (woollen carpeting), reed and bamboo products, blacksmithy, handmade paper, pottery
Mountain	Grain milling, furniture, fruit processing, carpets	Fruit processing, textile, radipakhi, reed and bamboo products

Source: ISC, A development study of cottage and small industries, Kathmandu, 1984.

In recent years, a growing number of cottage-size enterprises has been registered, increasing the scope for the efficient execution of support measures, and indicating a slow trend towards more sophisticated and capital-intensive production in the small industry and cottage-scale sector. During the 1980-86 period, the total number of registered cottage establishments increased by more than 13,300; in 1986/87 the total number registered was approximately 31,000. The enterprises which registered between 1980 and 1986 recorded total industrial output by Rs. 1,170 million and total MVA by Rs. 467 million by 1986. There are indications that the registered cottage industries may be more efficient producers than large-scale industries: in the registered small industries, value added per worker was Rs. 8,420 per worker in 1981/82, and in the larger-scale units (>Rs. 2 million in fixed assets) it was Rs. 37,123. To attain this figure, however, the larger-scale units needed almost the ten-fold in capital equipment.

Cottage industries play a key role in Nepalese development policies (reviewed in Section 2.7). They are major employment and income generators, and in fact provide the bulk of all manufacturing employment; they can efficiently use scattered resources (and even agricultural and industrial waste) where this would not be worthwhile for larger industries; they employ and stimulate the entrepreneurial capabilities of a wide range of population groups; and they can become stepping-stones to modern, larger-scale manufacturing if proper support is made available to their modernization, the improvement of product quality and their effors to generate new markets.

2.5 Industrial linkages

Industrial linkages are an essential part of a fully developed industrial structure. Experience in developed countries suggests that over 50 per cent of total output of the manufacturing sector is sold to other sectors of the economy, or within the sector itself. Similarly, more than half of the industrial inputs tends to be purchased from other domestic economy sectors.

Table 2.8. Structure of output, value added and employment: Informal manufacturing (household units only), 1977/78

Subsectors	No. of household units	% of total	Output (Rs. million)	Per cent	Value added (Rs. million)	Per cent	Employment (No.'000)	Per cent
Agro-based industries	340,026	45.4	155.7	33.0	33.1	20.6	431	41.8
Forest-based industries	192,017	25.7	55.6	12.0	24.0	15.0	262	25.4
Non-metallic products	5,603	0.7	6.9	1.0	4.5	2.8	13	1.3
Metallic products	24,715	3.3	48.9	1.0	17.2	10.7	53	5.1
Cotton and woollen textiles	181,335	24.2	197.3	42.0	79.7	49.8	266	25.8
Leather and leather products	3,354	0.5	2.7	0.6	1.0	0.6	4	0.4
Plastic products	67	-	0.9	0.2	0.5	0.3	0.1	-
Detergents/chemical	-	-	-	-	-	-	-	-
Drugs/medicines	-	-	-	-	-	-	-	-
Miscellaneous	722	-	0.9	0.2	0.01	-	0.7	-
Total	740,639		460.9		160.02		1,029.8	

Source: UNIDO (Madhukar Rana, Deepak Thapa), Role of Women in Nepal's Industrial Development: Status, Constraints, Opportunities and Prospects, Volume I, November 1987.

In Nepal, no sufficiently detailed data are available to make an assessment of the extent of linkages. There are few basic industries. Cement, lead and zinc production, however, do rely on domestic raw materials. Also, the textile, jute and leather industries rely to a large extent on domestic inputs; in contrast to the basic metals industries just mentioned these industries show intensive forward linkages as well. Other industries with strong backward linkages are primary processing industries such as cereal milling, saw milling, dairying, animal feed and the production of sugar, tea, bidi, cigarettes, cereal preparations and jute goods. Import-substituting industries with strong inter-industry linkages (mostly backward) are confectionery, noodles, cigarettes, beer, soft drinks, and distilling. In Nepal, the primary processing category accounts for over 50 per cent of the total industrial output while the second category accounts for a very small proportion of total manufacturing output.

The forward and backward linkages of other industries are weak. The field survey conducted as part of the present analysis (see Chapter 3), however, produced some interesting details on linkages in the formal and informal sectors. The sample industries in the formal sector appeared to have good linkages among themselves. The bakery and confectionery industries have used the products of flour and sugar mills and ghee factories. A pharmaceuticals plant acquired inputs (herbs) from informal sector enterprises, but it has also used the herbs produced by a herbal products processing factory. Distilleries are basically dependent on domestic sugar. Foam plastic produced domestically is used as an input by garment, furniture and bus body making factories. Leather is sold to other shoe factories by one of the shoe and leather producers.

The sample industries were found to have used domestic industry products for other purposes as well. Jute products e.g. are also used by brick and tile factories, cement, carpet and plastic foam manufacturers. Likewise, plastic products produced domestically are used by many industries for packaging purposes.

Very few formal industries have linkages with informal sector industries. One shoe factory buys raw hides from local butchers; it also sells leather (hides) to local shoemakers. Foam plastic is used by informal garment and furniture industries. Yarn and acryl produced in the formal sector are purchased by a large number of informal knitting and textile industries. Carpet making, ghee processing, seed oil extraction, soap and biri making are informal industries which get their inputs from within the informal sector. No industry was reported to have formal subcontracting systems for production or purchase. In a number of cases complaints were voiced about the fact that wholesale buyers, whose position in the market is much stronger, have resorted to unfair buying practices in their dealings with informal sector enterprises.

2.6 Trade in manufactures

Nepal, being a country where most production is oriented towards the domestic household consumption, its exports are small. Since 1979/80, the export share of GDP has fluctuated around 5 per cent. The textiles subsector dominates exports, providing 57 per cent of the export earnings in 1984. The main export items are carpets, leather and jute products (see Table 2.9); a

wide range of food products (generally of a low degree of processing) is also exported in varying quantities.

Table 2.9. Major manufactured exports, 1980-1985
(Rs. million)

Commodities	1980/81	1981/82	1982/83	1983/84	1984/85
Woollen carpets	70.12	85.26	134.64	256.95	276.07
Leather	97.24	85.64	95.14	127.82	173.77
Readymade garments	25.40	23.26	18.91	12.81	32.50
Handicraft goods	152.05	14.05	13.91	19.53	22.50
Jute goods	41.85	83.46	179.74	188.28	132.34
Dried ginger	10.8	15.3	19.3	37.1	38.7
Ghee	54.0	26.2	36.8	45.8	39.4

Source: Statistical Yearbook of Nepal 1987.

Imports constitute a much larger share of GDP: from 15 per cent in 1979/80 they rose to 18 per cent in 1984/85. The major categories of goods imported are machinery and vehicles, fuel, textiles, iron and steel. As exports have been small and stagnating, the trade deficit has grown steadily, from Rs. 2,403 million in 1979/80 to Rs. 5,310 million in 1984/85.

Although there is not as in the 1960's an almost complete trade dependence in India, most of Nepal's trade is still with that country. During the 1980's, India's share of Nepalese exports has always been more than 50 per cent, rising from 61.6 per cent in 1980/81 to 74.7 per cent in 1984/85. The Indian share of Nepalese imports was 49.1 per cent in 1980/81 and remained below 50 per cent until 1984/85, when it rose to 54.0 per cent. Exports to India accounted for most of the food exports. Jute goods and leather have also increasingly been exported to India. Carpets are mainly exported to Europe. On the import side, India predominates in so far as food is concerned, and the same is true, to a lesser extent, for chemicals and drugs. India's position is strong, but not predominant, in machinery and transport equipment. Almost all fuel is imported from overseas. Japan, the USA, the USSR, the Republic of Korea and the Federal Republic of Germany are the major overseas trading partners.

Nepal's trade dependence on India is a consequence of its landlocked position. Transit costs of overseas trade are considerable: Nepal's nearest port, Calcutta, is 1,100 km. from the southern border. A road connexion with China exists, but intensive trade contacts are inhibited by the high costs and seasonal nature of road transport through the Himalayas.

In spite of the worsening trade deficits, Nepal had a small balance of payments surplus during the first half of the 1980's. For this surplus the country has largely depended on foreign aid, tourism and payments to Nepalese citizens who (have) serve(d) in India and UK Gurkha regiments.

2.7 Industrial policies

An assessment of past policies, as reflected in Nepal's development plans, would indicate reliance on both import substitution and export-led strategies. The accent is, in principle, on a balanced approach. But in terms of the programmes or projects developed and promoted one may observe that the Government seems to have been giving most emphasis to import substitution.

The section on industry in the current Seventh Five-Year Plan (1985-90), drawn up by the National Planning Commission (NPC), in consultation with the Ministry of Industry, allots the manufacturing sector several important tasks. The sector is expected to act as the country's major foreign exchange earner; to produce import substitutes to save foreign exchange; and to provide an increasing share of non-agricultural employment.

Within the manufacturing sector, small-scale and cottage industries have received special attention. It is recognized that family-based, labour-intensive rural manufacturing activities will have to provide a large part of manufacturing production for many years to come. The country's limited resource base and internal market, and the obstacles met in tapping major overseas markets restrict the viability of large enterprises. Cottage and small-scale industries, however, have proved to be successful in conquering international market niches - the carpet industry is a good example. Apart from carpets, certain other small-scale industry activities (such as readymade garments, handmade paper and ceramics production) are therefore to receive special assistance under the present Seventh Plan. Table 2.10 gives a breakdown of expenditure for the cottage and small-scale sector.

Table 2.10. Development expenditure on cottage and small-scale industry, 1985-90
(Rs. million)

Project	Expenditure
General programme (except projects)	110.0
Intensive programme	140.0
Sales promotion service	70.0
Readymade garments and handmade paper projects	9.0
Ceramics project	2.0
Entrepreneur development programme	1.5
Rural training project	1.0
District level programmes	6.6
Total	399.5

Source: National Planning Commission - The Seventh Plan (1985-1990)

The above figures reflect only the expenditures to be incurred in activities promoted by the Government. In addition to this, private sector investment in 18,400 cottage industries (including services-related industries) is estimated at Rs. 825.6 million.

The intensive programme mentioned in the Table 2.10, will cover projects like the cottage and small scale industry project, under IDA and UNDP assistance, and integrated rural development projects, industrial village projects and the hill area development projects under Swiss assistance in Dolakha and Sindhupalchowk districts. Under these projects 5,500 persons will be given motivational, entrepreneurship and management training and 9,600 persons will be given skill development training. In addition, raw materials and implements equivalent to an amount of Rs. 15.2 million will be supplied. Measures to stimulate market-oriented production in the sector will include domestic and international sales promotion, Government purchasing and the establishment of storage facilities. The implementation and supervision of the programme will to a large extent be in the hands of local branch offices which will select industries to be developed or established, and will promote local participation in the programme, e.g. through the selection of trainees for skills development.

The 1985-90 programme for the larger scale industry includes:

- completion of a number of public-sector plants established during the Sixth Plan;
- expansion of several existing public enterprises;
- feasibility studies and analyses of industrial performance problems;
- expansion and improvement of facilities at existing industrial estates;
- construction of several new industrial estates;
- improving the raw material supply to the cotton and tobacco industries;
- special stimuli for export industries;
- simplification of administrative procedures for the registered industries;
- improved availability of credit;
- manpower training.

Table 2.11 shows the allocation of funds under this programme.

The Seventh Plan and the Investment Programme for the year 2000 developed by ISC have certain limitations. Little attention has been given to intersectoral linkages and appropriate project selection techniques. Both documents lack the following elements:

(i) Comparison of costs/value added for each product at border and at national and free-trade level;

(ii) Attention to production technology, research and development;

(iii) Assessment of overall manpower needs (demand/supply) including training needs for the different products proposed;

(iv) Identification of subsectors/products for productivity development and quality improvement (apart from the textile/cotton and leather subsectors).

Table 2.11. Organized industries: Allocation of funds in the Seventh Plan, 1985-90
(Rs. million)

Programme	Expenditure
Public sector industries	1,452.6
Industrial estates	100.3
Finance and credit	252.0
Raw materials development	108.2
Surveys, studies	105.2
Total	2,018.3

Source: National Planning Commission - The Seventh Plan, 1985-1990.

In spite of the export-orientation of both documents, most of the projects proposed are essentially aimed at meeting domestic demand. In the case of the Seventh Plan, 98 of 121 projects announced in the Plan comprise import substituting industries with an invesment of Rs. 2,284 million as against Rs. 145 million for 23 export promoting projects. The Investment Promotion Programme for 2000, moreover, includes many projects in industries in which more or less self-sufficiency has already been attained. The serious capacity underutilization problems in Nepalese industry would thus be exacerbated.

The 1987 Industrial Policy, in recognition of the limits of the domestic market, announced some special incentives for export industries:

(i) To be entitled to Government's incentives and facilities, the minimum value added required (fixed at 15 per cent for the import competing industries) is only 10 per cent in the case of industries exporting more than 50 per cent of their output;

(ii) Provision of pre-export loans to exporters;

(iii) Provision of duty draw-back (custom, excise and sales tax) to exporters and/export-oriented industries, as well as ancillary industries to the extent of export;

(iv) Tax exemptions (as in the 1981 Industry Policy);

(v) A National Award for successful exporters;

(vi) Bonded warehousing provision to assist the operation of export-oriented industries, including establishment of an EPZ and Industrial Villages.

The 1987 Industrial Policy also provides more scope for private enterprise. The licensing procedure for industrial enterprises has been considerably simplified. No licenses will be required any longer for cottage industries. Industries with a maximum fixed capital of Rs. 10 million are also exempted from registering, provided that they do not need foreign exchange for their main input purchases (i.e. those importing from India). More scope for licensing has been given to local authorities, to stimulate the location of enterprises away from the main urban centres. Furthermore, most public sector industries are intended to gradually be moved over to the private sector.

Protection is to be accorded uniformly to correspond to a 30 per cent effective protection rate and will consist of a "protection package" consisting of subsidies, tax concessions, tariffs, etc. Although an undifferentiated rate may not be best adapted to the needs and characteristics of the individual industries (some cottage industries which are performing well may need fairly strong continued protection for the time being), the drastic cut of protection rates was considered unavoidable to stimulate manufacturing on sound economic principles. The reductions should, however, be gradual to allow Nepal's industry to adapt to increased competition, especially from India.

Finally, institutional changes have been proposed to improve industrial promotion and marketing both domestically and abroad, services to foreign investors, raw material supply to SSIs, management services, transfer of technology and production methods.

The 1987 Industrial Policy's main limitation might be the fact that it is not related to any real long-term programme of industrial development. While most of the tax incentives provided under the policy are appropriate, some additional incentives, based on successful experience of other Asian countries (particularly for research/development, training grants to skill-intensive industries, promotional grants for sales promotion missions abroad based on actual orders received, special commodity rates for air freight, etc.) may be very pertinent.

2.8 Human resource planning for industry needs

Responsibility for manpower planning lies with the Human Resources Section (HRS) of the National Planning Commission (NPC). A UNDP/ILO project was initiated in 1980 to provide data on requirements and supply for the Sixth Plan, and to establish permanent capacity in the Human Resources Section to provide information on a regular basis. The project restricted itself to the public sector. Major problems identified by the project were:

- the shortage of technical personnel and training capacity;

- the lack of co-ordination with regard to manpower training among the ministries (HRS jurisdiction is described as "not clearly defined" and "declining");

- the overconcentration of technical personnel in Kathmandu Valley, exasperating shortages elsewhere.

A 1984 study on human resources (Agrawal/Kayastha) refers to labour market surveys conducted by the Department of Labour, but does not mention details - the studies are "very limited in scope". Manpower was given attention in the Fifth and Sixth Plans, with education and vocational training being encouraged, as well as labour-intensive production methods. There was, however, no actual manpower planning outside the public sector. Within the public sector, manpower estimates are drawn up by the departments of the ministries; these are passed on to the NPC via the ministries. The NPC compares the requirements with information furnished by the suppliers, the educational and training establishments. There is no indication as yet that more than a comparison takes place.

Annex Table 4 gives an overview of the manpower training targets and achievements of the Sixth Plan. The figures only refer to the training given by the public labour supply centres. Less than a third of the targetted number actually received training; in two cases, the planned centres could not be established. Most of the manufacturing skill training was in traditional skills (carpentering, biri-making, spinning/weaving). Among the modern skills provided, only typesetting stands out as a major category. Few workers received training in mechanical or electrical engineering (cf. Annex Table 5). Unfortunately, no demand figures per skill category are available, which makes it difficult to establish how demand and supply are matched.

Under the Seventh Plan, the demand for engineering personnel (all levels) has been estimated at 7,880, of which the country will only be able to supply 4,800. Recruitment of foreign experts will have to fill the gap as long as technical education is not sufficiently strengthened. At the basic level, the labour supply centres have been given the task of training 4,740 persons, including 650 women. Skill surveys are to be held in 600 panchayats. A one-year vocational training programme is to concentrate on the much needed electrical/mechnical engineering skills. Research on employment (Employment Research and Development Centre) is to be intensified. Total expenditure has been estimated at Rs. 33,400 (see Table 2.12), of which more than half for the labour supply centres.

2.9 Education and skills development

Between 1975 (when free primary education was introduced) and 1984/85 primary school enrolment increased to 83 per cent of the children of the relevant age class. The literacy rate was 29.9 per cent in 1985. Female literacy and participation in primary education, however, are still very low. Female literacy was at 12 per cent in 1981, a rise of 8.1 per cent in ten years, but nevertheless the figure was far below the national average. By 1985, female literacy was estimated to be around 20 per cent (which is possibly too high, although female literacy is known to grow faster than male literacy). The estimated literacy rate for men was around 35 per cent in

Table 2.12. Labour training: Allocation of expenditure in the Seventh Plan, 1985-90
(in million rupees)

Project	Allocated expendiures
Labour supply centres	19,000
Industrial and vocational training	3,000
Employment services	4,000
Training and skill up-grading	5,400
Research	2,000
Total	33,400

Source: National Planning Commission - The Seventh Plan, 1985-90.

1985. Whereas in 1975 only 18 per cent of the primary school students were female, the share had risen to 29.5 in 1985. The 1985 figures for female participation in secondary and higher education were 22.5 and 21.5 per cent, respectively (see Table 2.13).

Table 2.13. Participation in education at various levels, by sex, 1985

	Males		Females	
	Number	Per cent	Number	Per cent
Primary (7-10 years)	1,254,801	70.5	524,967	29.5
Lower secondary (11-12 years)	190,964	75.1	63,346	24.9
Secondary (13-15 years)	181,200	77.5	52,620	22.5
Higher educational (all levels)	43,408	78.5	11,924	21.5

Source: Ministry of Education and Culture, quoted in SSNCC/WSCC - Statistics on Women in Nepal, 1986.

Although the efforts to increase female participation in education have been successful, there is still a serious shortage of women disposing of basic literacy and technical skills. In 1985, only 48 out of 508 students enrolled in technical schools were female; out of these 48, 34 were trained as sanitary and health workers, and very few are at present trained in manufacturing skills. Female participation in higher education shows that women are beginning to participate in engineering courses: in 1984/85 123 out of 2,148 student were women. Only one of these was a BA-level student. Also, 1,327 female students followed courses in science and technology. These courses

tend to be theoretical rather than practical, however, and the knowledge acquired may therefore not always correspond to the needs of development (see Table 2.14). A fairly large number of female students followed management courses. The overwhelming majority, however, studied humanities and social sciences.

Table 2.14. Students in higher education establishments, by sex, 1984/85

	Boys	Girls	Total
A. Technical sector			
1. Engineering	2,025	123	2,148
2. Forest science	317	16	333
3. Agriculture and animal science	1,163	13	1,176
4. Medical science	615	515	1,130
5. Science and technology	7,498	1,327	8,825
Total	11,618	1,994	13,612
Per cent	85.4	14.6	100.0
B. Vocational/occupational sector			
6. Management	10,837	1,566	12,403
7. Law	3,940	269	4,209
8. Education	2,354	825	3,179
Total	17,131	2,660	19,791
Per cent	86.6	13.4	100.0
C. General sector			
9. Humanities and social sciences	14,293	7,259	21,552
10. Sanskrit	366	11	377
Total	14,659	7,270	21,929
Per cent	66.8	33.2	100.0
Grand total for various levels and campuses	43,408	11,924	55,332
Per cent	78.5	21.5	100.0

Source: SSNCC/WSCC - Statistics on Women in Nepal, 1986.

With academic qualifications that are often ill-adapted to the needs of a developing economy with limited job opportunities, unemployment rates are especially high among female absolvents of higher education establishments. A 1983 survey (Kayastha 1985) found that 44.9 per cent of the female graduates

in a sample were unemployed, as opposed to 19.2 per cent of the male graduates. Unemployment was found to be highest among humanities and social science graduates (50 per cent), and lowest among science and technology students (14.3 per cent).

A Women's Polytechnic is planned to be established with Indian aid. The enrolment is expected to be about 500 to 600 per year, involving 10-15 per trade. In total there are to be 66 job-oriented courses. While the training develops skills for self-employment, the Polytechnic nevertheless is overwhelmingly conceived to meet the manpower needs of service industries. It does not cater to the specific needs of the women in industry, except for food and textile technology. On the positive side, its orientation is towards practicing the skills taught: it is to have a production-cum-training centre and to provide extension services.

Apart from formal education, a fairly large number of development projects exist that provide on-the-job training for the cottage industries. The scattering of resources among projects and districts has unfortunately much reduced the impact of such training schemes.

One of the more successful schemes has been the UNDP/World Bank-IDA sponsored cottage and small industries (CSI) project of the Cottage Industries Development Board (CIDB). Under the supervision of the Department of Cottage and Village Industries (DCVI), the project was founded with a view to developing skills and promoting CSI's in initially 9 districts of the Bagmati and Gandaki zones. More than 5,000 artisans had received training by 1986. Besides providing skill and management training to CSI artisans, the CIDB also carried out the preparation and distribution of designs, technical assistance, entrepreneurship development training etc. Table 2.15 summarises the major training programmes launched by CIDB during the Sixth Plan (1980-85), with the total number of trainees. It is clear that much of the programme concentrates on traditional female skills. Women predominate in the textile projects, but are not representated in the others (metal, wood, dyeing, leather).

Approximately one-half of the total number of trainees was estimated to have been female. The UNDP/World Bank-IDA CSI project is noted for its sophistication in institutional planning and also for the creation of new centres of inter-ministerial responsibility within existing institutions (e.g. the Ministries of Commerce and Industry, the Nepal Rastra Bank and public/private joint venture companies for wool and metal trade.) The impact of this initiative on target groups and on the institutional system and its cost-effectiveness have made the project a model of its kind in Nepal. The project now intends to expand to 38 districts by concentrating on districts with integrated rural development projects (e.g. Sagarmatha, Karnali-Bheri, Mahakali). Considerable barriers still exist with regard to the participation of women in general education and vocational training.

The low participation rates are a consequence of prevailing attitudes, e.g. that the primary role of a girl is to get married and bear children; education levels of females tend to be related to their opportunities in the marriage market rather than to their intellectual capacities and career opportunities. A woman is not expected to be better educated than her husband. Apart from having lower participation rates, the educational levels attained by women are also lower than those of men. As pointed out above, female participation rates in technical education are particularly low. There is a widespread

Table 2.15. Training output of CIDB by industries, 1980/81-1984/85

Subjects	Total no. trained	Male	Female	Ratio of male/female
Textile	1,430	715	715	1:1
Wool	1,030	206	824	1:4
Tailoring	862	345	517	2:3
Hosiery	757	303	454	2:3
Metal crafts	102	102	0	-
Cane/bamboo	260	260	0	-
Carpentry	305	305	0	-
Dyeing	45	45	0	-
Jute	119	71	48	3:2
Dhaka (cotton printing)	72	36	36	1:1
Leather	113	113	0	-
Miscellaneous	901	-	-	-
Total	5,996	2,501	2,594	1:1

Source: Seventh Plan, Op.Cit., p.642 and CIDB (the male/female ratio are estimates).

Note: Trainees entering business constitute only 30 per cent of the total, as judged by the number of successful loan applicants.

notion (also among women) that technological complexities can only be understood by men (this results in a loss of status and jobs of female workers both in industry and agriculture wherever modernization takes place). Given the obvious shortage of skilled workers, higher-level employees and managers, these attitudes are additional barriers to the development of the country.

3. The contribution of women to the manufacturing sector

3.1 Female employment in manufacturing - actual and prospective

In 1976/77 women comprised 11.2 per cent of the industrial labour force; in 1981/82 it was 11.8 per cent. On the surface therefore there was little change in female participation. Although in absolute terms women's employment in manufacturing shows an increase of 71 per cent between 1976/77 and 1981/82 compared with 62 per cent for men, the employment base was very low for females, namely 5,557 compared to 44,062 males in 1976/77. In 1981/82 the number of females were 9,503 compared to 71,345 males. Over the 5-year period the increase in number of males employed in manufacturing was thus almost 7 times that of females.

Female participation in industry is unevenly distributed between branches (see Table 3.1). The structure of female employment shows that their concentration is on industries which are "female specific" activities such as spinning/weaving, carpet making, knitting, tea processing, food processing, etc. There are relatively few women in the wood, paper and printing industry and in the metal products sector.

At present the following industries/products offer women most of the opportunities for employment, accounting for more than 90 per cent of the female employment:

Textile/yarn	Fruit canning/bottling
Carpets/rugs	Cigarettes
Knitwear	Grain milling
Tea processing	Bakery/confectionery
Bricks/tiles	Matches
Bidi	Drugs/medicines

Women are not only underrepresented in the industrial labour force in general. Their participation at various skill levels also leaves much to be desired. Annex Table 6 shows the occupational distribution in a number of large-scale industries surveyed in 1983 (Shrestha, 1983). Women are mainly represented in "typical" female production jobs requiring relatively simple skills. At the higher skill level, quite a few women are employed as laboratory technicians and quality controllers, although their shares are well below those for men, and in absolute numbers their share is minimal, as opposed to the number of female workers in the unskilled and (semi-)skilled categories. The 100 per cent female category in the table is for nurses, who cannot be called production personnel. No women were found in typical engineering jobs. In the future, the Industrial Services Centre (ISC) intends to make sector-wide detailed breakdowns of male and female manufacturing regularly. The clear overall picture thus obtained of the position of women, and of development trends in female employment, should be of great value for the formulation of policies to strengthen the role of women in industry.

On the basis of the growth projections for industrial production up to 1990 (see Chapter 2.3) and the present trend in female participation among the branches, it may be possible that female employment in manufacturing will grow from 9,500 in 1981/82 [and 15,800 (rough estimate) in 1985/86] to around 29,000 in 1990 (see Table 3.2).

Table 3.1. Structure of female employment, 1976/77 and 1981/82

Products/groups	1976/77 Male	1976/77 Female	1976/77 Total	1976/77 Fem. % of total	1981/82 Male	1981/82 Female	1981/82 Total	1981/82 Fem.% of total
1. Food and allied	17,772	2,249	20,021	11.3	23,089	2,660	25,749	10.3
Grain/oil milling	14,076	1,095	15,171	7.2	14,892	1,296	16,188	8.0
Bakery/confectionary/biscuits	605	303	908	33.0	1,212	215	1,427	15.0
Tea processing	1,169	815	1,984	41.0	1,885	953	2,838	33.5
Sugar refining	1,922	30	1,958	1.8	3,556	110	3,666	3.0
Dairy products	n.a.	n.a.	n.a.	n.a.	742	21	763	2.7
Animal feed	n.a.	n.a.	n.a.	n.a.	558	23	581	2.9
Fruit canning/bottling	n.a.	n.a.	n.a.	n.a.	244	42	286	14.7
2. Drinks and tobacco	5,052	106	5,158	2.1	9,757	1,330	11,087	11.9
Bidi	4,915	93	5,008	1.8	8,771	1,096	9,867	11.1
Cigarettes	n.a.	n.a.	n.a.	n.a.	554	208	762	27.0
Beer/soft drinks	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Liquor	137	13	150	8.6	432	26	458	5.6
3. Textile and wearing apparel	2,209	1,248	3,457	36.1	11,541	2,749	13,911	19.8
Carpets and rugs	593	705	1,298	54.3	1,790	884	2,674	33.0
Textile/yarn	1,199	511	1,710	30.0	2,072	1,050	3,059	34.3
Knitwear	105	7	112	6.0	919	226	1,145	19.7
Jute goods	n.a.	n.a.	n.a.	n.a.	5,808	216	6,024	3.5
Footwear/tanning	312	25	337	7.5	952	57	1,009	5.6
4. Wood, paper and printing	5,475	318	5,793	5.5	6,849	418	7,267	5.7
Saw mill	1,336	7	1,343	0.5	962	2	964	0.2
Wooden furniture	1,655	96	1,751	5.4	2,937	143	3,080	4.6
Matches	614	74	688	10.7	553	89	642	13.8
Paper manufacturing	226	64	290	22.4	227	31	258	12.0
Printing	1,644	77	1,721	4.4	2,170	153	2,323	6.5

Table 3.1 (cont'd)

Products/groups	1976/77 Male	Female	Total	Fem. % of total	1981/82 Male	Female	Total	Fem.% of total
5. Plastics, chemicals & pharmaceuticals	365	76	441	17.2	768	64	832	7.6
Soaps	152	34	186	18.3	274	11	285	3.8
Drugs/medicaments	213	42	255	16.5	72	11	83	13.2
Plastics/PVC/chemicals	n.a.	n.a.	n.a.	n.a.	423	42	464	9.0
6. Non-metallic mineral products	5,159	860	6,019	14.3	14,687	1,947	16,634	11.7
Bricks/tiles	5,159	860	6,019	14.3	14,208	1,942	16,150	12.0
Cement/cement products	n.a.	n.a.	n.a.	n.a.	479	5	484	1.0
Other non-metallic products	-	-	-	-	-	-	-	-
7. Metalic products	1,300	89	1,389	6.4	3,605	238	3,843	6.2
Metal utensils/metal products	489	14	503	2.7	780	31	811	3.8
Fabrication/repair	224	24	248	9.6	331	-	331	-
Metal furniture	481	6	487	1.2	543	3	546	-
Iron/steel goods	n.a.	n.a.	n.a.	n.a.	1,811	171	1,982	8.6
Jewellery goods	106	45	151	30.0	140	33	173	19.0
8. Activities n.e.s.	6,730	611	7,341	8.3	1,047	97	1,144	8.5
9. Grand total	44,062	5,557	49,619	11.2	71,345	9,503	80,846	11.8

Source: UNIDO (Madhukar Rana, Deepak Thapa), Role of Women in Nepal's Industrial Development: Status, Constraints, Opportunities and Prospects, Volume I, November 1987.

Table 3.2. Trends of employment in manufacturing. Projections for 1985/86 and 1989/90

Industry products/groups	Male		Female		Total	
	1985/86	1989/90	1985/86	1989/90	1985/86	1989/90
1. Food and allied	31,505	36,601	3,865	4,951	35,370	41,552
Grain/oil milling	24,689	27,573	2,147	2,398	26,836	29,971
Bakery/confectionary/biscuits	1,564	2,290	276	404	1,840	2,694
Tea processing	2,706	4,108	1,363	2,069	4,069	6,177
Sugar refining	2,254	2,246	70	69	2,324	2,315
Dairy products	-	-	-	-	-	-
Animal feed	292	384	9	11	301	395
Fruit canning/bottling	-	-	-	-	--	-
2. Drinks and tobacco	13,133	18,127	1,982	2,620	15,115	20,747
Bidi	11,734	16,583	1,465	2,049	13,199	18,632
Cigarettes	1,399	1,544	517	571	1,916	2,115
Beer/soft drinks	-	-	-	-	-	-
Liquor	-	-	-	-	-	-
3. Textile and wearing apparel	20,722	42,569	6,443	15,843	27,165	58,412
Carpets and rugs	8,044	23,330	3,962	11,490	12,006	34,820
Textile/yarn	3,651	6,166	1,907	3,222	5,558	9,388
Knitwear	940	2,684	230	658	1,170	3,342
Jute goods	5863	6,223	213	226	6,076	6,449
Footwear/tanning	2,224	4,166	131	247	2,355	4,413
4. Wood, paper and printing	15,734	28,679	945	1,688	16,679	30,367
Saw mill	478	401	-	-	478	401
Wooden furniture	12,036	23,734	580	1,144	12,616	24,878
Matches	1,793	2,923	287	468	2,080	3,391
Paper manufacturing	127	9		17	12	144
Printing	881	928	61	64	942	992
Plywood	419	602	-	-	419	602

Table 3.2. (cont'd)

Industry products/groups	Male 1985/86	Male 1989/90	Female 1985/86	Female 1989/90	Total 1985/86	Total 1989/90
5. Plastics, chemicals and pharmaceuticals	3,757	8,150	318	673	4,075	8,823
Soaps	1,338	2,869	53	113	1,391	2,982
Drugs/medicaments	489	716	74	109	563	825
Plastics/PVC/chemicals	1,930	4,565	191	451	2,121	5,016
6. Non-metallic mineral products	16,964	24,191	2,142	3,092	19,106	27,283
Bricks/tiles	15,644	22,572	2,133	3,078	17,777	25,650
Cement/cement products	941	1,378	9	14	950	1,392
Other non-metallic products	379	241	-	-	379	241
7. Metalic products	3,579	5,121	99	132	3,678	5,253
Metal utensils/metal products	1,585	2,322	63	92	1,648	2,414
Fabrication/repair	580	818	-	-	580	818
Metal furniture	1,260	1,811	-	-	1,260	1,811
Iron/steel goods	-	-	-	-	-	-
Jewellery goods	154	170	36	40	190	210
8. Activities n.e.s.						
GRAND TOTAL	105,394	163,438	15,794	28,999	121,188	192,437

Source: UNIDO (Madhukar Rana, Deepak Thapa), Role of Women in Nepal's Industrial Development: Status, Constraints, Opportunities and Prospects, Volume I, November 1987.

The trend towards faster than average growth in some of the 'female specific' industries would be expected to result in an increase of the female share by 1990 from 11.8 in 1981/82 [and estimated 13 per cent in 1985/86] to around 15 per cent.

In the trend projection used, textile and wearing apparel industries will clearly take over from food and allied industries as the major employer of women, with more than half of all female employment. In 1981/82 both industries employed approximately the same number of women. There may be more limited growth in respect of women's employment in other branches, and even a diminishing share in metal products (which employs few women altogether).

The branch trend analysis of prospective growth and on women employment potentials does not take into account possible effects of measures (e.g. in the field of training) or policy interventions which might be undertaken towards a desirable diversification of female employment.

Notwithstanding such prospective diversification it would seem clear that for female employment, the textiles, garments and carpet industries hold important growth prospects. Such evidence as exists, however, indicates that the growth would be almost wholly in semi- and unskilled employment. A diversification of women employment should be aimed at, in order to avoid misutilization of female resources and their potential role in the industrial development of the country. In Chapter 4 a number of suggestions will be formulated for the increase of female participation, not only in overall manfuacturing employment, but also in branches and at skill levels where so far few women have been employed. In particular, the suggestions are consistent with the premise that such female employment increase would essentially result from additional efforts by way of increased production (or service activities inter-linked with manufacturing).

As for potential growth trends beyond 1990, indicated above (under sub-chapter 2.3), the planned concentration of manufacturing on satisfying basic needs, such as food and clothing, suggests the expansion of light industry, as does the envisaged growth of export-oriented industry (e.g. clothing and leather goods). Such light industry development would be expected to lead to an increase in the proportion of women to the total labour force. It might be quite reasonable to expect the proportion of women to rise from presently about 13 per cent to, say, 18 per cent by 1995. In absolute figures, that would mean a demand for an increased female labour force in (formal sector) manufacturing from the present about 15,800 women to about 45,000 (out of a total need for a manufacturing labour force of 250,000).

With regard to female participation in the informal (manufacturing) sector the main source of data indicating male and female ratios is a 1972/73 sample survey. The survey suggests that out of an estimated total of 1,040,000 informal sector workers approximately 430,000 were female. Few women were involved in paid informal sector work (only 17 per cent of a total of some 10,000) and an even lower share was recorded for paid female managers: 10 per cent out of a total of 6,500. Women were slightly better represented among unpaid managers and supervisors (18 per cent), but the overall picture is one where women are overwhelmingly engaged as unpaid family workers. In the more urbanized areas, paid employment is more common; women tend to predominate in urban informal textile production.

A recent study (Acharya 1984) of registered cottage industries in a selected district (Dhankuta) shows that one-third of the workers were women. Generally speaking, their situation seemed much like that described in the 1972/73 survey; they were mainly employed at the lowest level, and were generally involved in "typical" female activities such as weaving and sewing. Technology imports were found to threaten female employment: even tasks requiring very simple modern technical skills are considered the preserve of men. Moreover, SSIs operating with modern machinery was found to be serious competitors for traditional cottage industries employing a large number of women (such as textiles).

A survey carried out in 1983 on the extent of use of hired labour and female workers in registered cottage industries in the Kathmandu Valley and Gandaki Zone indicates similar participation levels of women, namely over 36 per cent overall. As shown in Table 3.3, this overall percentage level is, of course, primarily a function of the type of industry (subsector) included in the survey; the percentage level for women participation in the making of woollen products and cotton textiles being 89 and 62 per cent, respectively, and that for metal crafts being zero.

Table 3.3. Extent of the use of hired labour and female workers in cottage industries, 1983 (Kathmandu Valley and Gandaki Zone)

Subsectors	Hired labour as percentage of total employment	Female labour as percentage of total employment
Woollen products	78.64	89.32
Cotton textiles	50.73	62.04
Metal crafts	70.37	0
Forest-based industries	73.96	16.67
Agro-based industries	64.75	19.67
Others	94.68	4.70
All cottage industries	79.67	36.35

Source: Nepal Rastra Bank, A study of cottage and small industries, Kathmandu, 1984, and ILO/ARTEP, Rural industrialization and employment in Asia, New Delhi, 1987.

The possible magnitude, indicated above, of increased women's participation in the envisaged (formal) manufacturing sector growth raises some important issues. Firstly, would such a growth reflect a genuine net increase in the contribution of women to industry? Secondly, as noted above, women are already well represented in various informal cottage sector activities. Is the informal sector best suited to women's participation due to the small scale of operation and because activities can be part-time and be carried out within the home and in fields where women already have traditional skills? Thirdly, international and historical experience suggests that a

growth of formal manufacturing production for the local market is often associated with a decline of cottage industry. If this were to happen in Nepal, then, because of the large numbers in cottage employment, would the overall position of women in industry not deteriorate rather than be enhanced? This danger can be overcome by guiding the development of cottage industry into areas which are not directly competitve, and by strengthening linkages between the formal and cottage sector.

Furthermore, when planning for increased participation of women in industry it should be realized that, altnough there is, generally speaking, much underemployment, and fairly widespread unemployment in urban areas, women are often overemployed. A 1980 study (CEDA, 1980) established that in rural areas the average daily time spent working on paid or unpaid tasks was 10.8 hours for women as opposed to 7.5 hours for men. There is thus no large female "labour reserve"in rural areas which can be tapped without problems. Major schemes to increase gainful employment of women in both the formal and informal sectors would therefore have to be parallelled by a reduction of female household workloads. This is in part a matter of changed cultural/social attitudes. In part, however, workloads can be reduced by infrastructural improvements (such as potable water supply) and improved tools and equipment (e.g. more efficient stoves are being introduced in a number of areas under the Seventh Plan). These improvements would be especially important for women in the informal sector, where domestic tasks and manufacturing are generally combined. In the formal sector, the provision of day-care facilities at production units is an obvious measure, although an often-heard counterargument is that this increases the cost of female labour and thus may lead to reduced recruitment of women.

3.2 Case studies on female participation in industry

3.2.1 Introduction

As part of the analysis carried out under the present study project, a field survey was carried out in September 1987 by the Nepal research team. It covers a sample of industries constituting about 5.0 per cent of the total number of industries in the Kathmandu, Biratnagar and Pokhara areas which were selected for case studies to supplement the information available in secondary sources. In addition, some plants in nearby locations were visited to increase the representativeness of the sample.

The industries were selected on the basis of stratified purposive sample. Two sets of questionnaires were used, one for the owner/manager of the industrial establishment, and the second for the female employees of the industries. In total, 49 industries were visited, and 136 employees were interviewed.

The main purpose of the case studies was to supplement the data and analysis based on secondary sources of information. For both the formal and informal sectors, two key variables were taken into consideration in selecting industries: employment pattern and product classification. These two key variables were considered to be adequate indicators to represent various industries and various levels of female employment.

The following aspects of the role of women in industry were taken into account to arrive at a good coverage of the essential industries in the sample:

(a) relatively few women are involved in modern (organized) industries;

(b) the country's export-oriented industries are in product lines employing more women;

(c) industries will be inclined to substitute domestic for immigrant labour if the supply of domestic skilled labour improves;

(d) some product lines are more "women-intensive" than others.

For the informal sector survey, 77 industries employing 486 persons in total were selected in the same locations as the formal sector industries: Biratnagar, Kathmandu and Pokhara. The units were mainly managed by women, but a number of male-led units with good market (and employment) prospects were also visited. Given the vast size of the informal sector and financial and time constraints, no representative sample could be made. Instead, care was taken to represent the major informal market-oriented industry groups in urban areas: forest, mineral and agro-based manufacturing, textiles and a small number of others, depending on the location.

Details of the field survey may be found in Annex 7; a summary of the results is given below.

3.2.2 Formal sector enterpises

(a) (Reasons for) participation levels

The proportion of female employment to total employment in the sample manufacturing industries was about 15.0 per cent. Around this low share female employment is fluctuated from 100 per cent to nil (see Annex 7). Although the difference in shares partly reflects varying branch shares of female participation, there were also considerable variations among units in one single branch. For instance, the Bansbari Leather and Shoe Factory of Kathmandu had 15.6 per cent female employees whereas Universal Leather Pvt. Ltd. of Biratnagar had only 7.0 per cent females. Likewise, in the textile industry, Gosali Kapada Udyog of Pokhara (which is little mechanized) with 89.0 per cent female employees contrasts with Balaju Kapada Udyog of Kathmandu (with power looms) with 26.5 per cent of female employees and Asoka Textile of Biratnagar (more mechanized producing synthetic materials) with no women.

The most common reason for a high percentage of women employees given by employers was that certain activities in the industries are most suited to women in terms of their attitudes and physical aptitudes. Examples are jobs requiring patience (packaging tea leaves) or both patience and precision (watch and radio/transistor assembly).

Other reasons mentioned by some employers for employing women were:

- women are more dependable workers;

- women are easy to supervise/control;

- availability of a large female labour force near the industrial location (men have often migrated elsewhere in search of work);

- no formal education required for the job.

(b) Educational levels, training and job status

The educational level of the employees in the selected industries was higher than average. Less than one-fourth of the women interviewed were illiterate while about one-tenth had a college education. Approximately half of the respondents had received training (Table 3.4). The higher levels are related to the location of the industries in and near major urban centres, where educational facilities are more readily available than in rural areas.

Table 3.4. Women's employment in sample industries by level of post and skills

Level of employment	Type of skill				
	Skilled	Semi-skilled	Un-skilled	Not known	Total
Top management (n = 6)	3	2	2	-	7
Middle management (n = 6)	-	5	8		
Technical officers (n = 5)	1	3	-	10	14
Non-technical officers (n = 5)	-	4	-	10	14
Production workers (n = 46)	426	1,060	288	9	1,783
Non-production workers (n = 16)	14	72	3	15	104
Total	446	1,142	293	49	1,930
Per cent	23.1	59.2	15.2	2.5	100.0

Source: UNIDO (Madhukar Rana, Arjun Shah), Role of Women in Nepal's Industrial Development: Status, Constraints, Opportunities and Prospects, Volume II, November 1987.

Note: n = Number of industries.

The women were largely employed as skilled production workers. In top and middle management, very few women are employed; in fact women were only found in these positions in the very few industries managed by women. The relatively high percentage of college graduates contrasts with the very low percentage of women in key positions and highlights the mismatching of education and employment opportunities (cf. Tables 3.4 and 3.5).

The status of the women in the manufacturing sector, as it emerges from the field survey, generally confirms the picture emerging from secondary data and particularly from the 1983 Shrestha survey: women's position in Nepal's industry is on the whole marginal, in both a quantitative and qualitative sence. With some exceptions, they represent only a fraction of the industrial

Table 3.5. Distribution of respondents (employees) by education, level and training

Description	Kathmandu sector	Biratnagar sector	Pokhara sector	Total (%)
Training obtained				
Within the company	29	5	-	34 (25.0)
Outside the company	18	4	11	33 (24.2)
Total	47	9	11	67
Percentage (n = 136)	34.5	6.6	8.1	49.2
Education level				
College graduate (B.A. & above)	12	3	-	15 (11.0)
High school pass (Secondary)	16	7	3	26 (19.2)
Primary level (5th grade & above)	33	2	14	49 (36.0)
Literate	12	-	3	15 (11.0)
Illiterate	15	11	5	31 (22.8)
Total	88	23	25	136
Percentage (n = 136)	64.7	16.9	18.4	100.0

Source: As Table 3.4.

labour force, and they are almost exclusively to be found at the lowest job levels. Moreover, these low-grade jobs are apparently often filled by women with a relatively high educational level. But given the high level of unemployment, even college graduates often have no choice but to accept unskilled work.

(c) Constraints on female employment

Constraints on female employment can be divided into two types of constraints, namely the general constraints that are encountered in the industries which affect women indirectly and those that relate directly and specifically to women.

The managements of the factories surveyed mentioned a wide range of problems which kept their enterprises from functioning at full capacity or from being competitive and which therefore singly or in combination had a negative influence on their employment potential (in descending order of frequency):

- unfavourable tax policies;
- raw material shortages;
- high, fluctuating raw material prices;
- obsolete machinery.

Such problems as capital shortage, inefficiency, shortage of skilled manpower, overstaffing, etc. were also mentioned.

Some of these points need some explanation. The tax problem (most frequently mentioned) would mainly appear to refer to excise duty on imported inputs and to sales tax. These make the products more expensive, and often incompetitive vis-à-vis cheap imports or products from the informal sector which are not taxed. Obsolete machinery is mainly a problem of old public sector factories whose modernization would demand fairly large capital investments. (Overstaffing is a public-sector problem as well, the result of employment policies which are only in part dictated by economic reasons.)

Specific constraints on female employment also emerged from the survey. The following reasons were given by employers as the most common for a low level of women's employment:

- low literacy/training levels;
- inhibiting social factors;
- the Factory Act, restricting female employment after 6.00 p.m.;
- lack of physical strength.

Other, less frequent reasons were:

- refusal of educated women to migrate/travel to work, or to engage in dirty work;
- lower efficiency of women workers;
- high rate of absenteeism (maternity leave, domestic problems);
- loss of investment in skill development when women marry and give up their jobs.

From the survey it comes out that women's employment depends to a considerable extent on the employer's perception of what is suited for women in the respective industry and also on the degree of mechanization introduced. Not all the employers maintained uniformity in stereotyping activities for women, e.g. Laxmi Wood Crafts employed 53 per cent women workers as the employer thought that the job suited women. As noted above (page 33) there were most significant differences between textile industries in the sample.

The attitude of employers with unfounded conceptions and assumptions regarding women also stands out as an often-cited constraint to women's employment. For instance, the lower efficiency of women workers and high rate of absentism and inhibiting social factors reported by the employers need to be put against proper assessments of comparative productivity/efficiency. Socially and culturally women in the Nepalese society have been found to be much more liberal than its neighbouring countries (CEDA, Status of Women in Nepal, Vol.II, 1980).

(d) Reasons for dissatisfaction among female workers

As Table 3.6 indicates, the great majority of interviewed women had not been promoted during their present employment. In the absence of data on male promotion, it is hard to say whether women are especially disadvantaged in this respect. The differential treatment of males and females emerges more clearly with regard to wages: over one-fifth of the women reported lower payment for comparable jobs. Low job status, perceived lower promotion rates and lower payment were generally mentioned as sources of dissatisfaction. A number of other, more industry-specific sources of dissatisfaction was also mentioned:

- low wage rate and wage differentials;
- little or no promotion and career prospects;
- unhealthy working environments;
- heavy work loads;
- absence of training facilities;
- seasonal employment;
- lack of facilities.

Table 3.6. Female employment in surveyed formal sector industries: Promotion and wage differentials

	Promotion			Wage differentials		
Sector	Yes	No	Total	Yes	No	Total
Kathmandu	29	59	88	27	61	88
Biratnagar	6	17	23	2	21	23
Pokhara	5	20	25	2	23	25
Total	40	96	136	31	105	136

Source: As Table 3.4.

Of the latter, the shortage of child-care facilities is an important one. Although traditional role perceptions will often prevent a woman from accepting manufacturing employment if it is available, the absence of such facilities will make the decision to break with traditional role patterns (which may be a sheer survival matter) even more difficult.

(e) Employment growth expectations

In spite of the many obstacles, the interviewed employers on the whole expected the number of firms in their particular industry to grow: within the next 10 years, the number of establishments in most industries was expected to double. The expected rates at which industries would expand (and the expectations with regard to zero growth) were not clearly related to a particular type of industry; rather, they would seem to express the

expectations of an employer based on the experience of his individual firm. In a number of cases, more efficient Government support was considered essential if growth expectations were to be realized. Along with the expansion of the various industries, employment is also expected to increase considerably. A majority of employers interviewed in Kathmandu and Pokhara even expected employment to double within five years. In other words, expansion is expected to be of a labour-intensive type.

The expected expansion in the industries surveyed and opportunities for employment, however, may not ensure increased opportunities for women, unless adequate measures are taken at the Government level to support such women participation.

As Table 3.7 shows, the foreseen employment growth would be strongest in industries traditionally employing a high percentage of women: confectionery, knitting, garments, carpets, radio assembly, pharmaceuticals and tea packing. Other industries (e.g. fruit canning, matches, jute) on the contrary expected women's employment to decrease in future due to modernization schemes, an

Table 3.7. Expected expansion of women's employment by industries

Industries	Cummulative number of women who can be hired in		
	2 years	5 years	10 years
Confectionery	20	50	100
Wood crafts	15	30	60
Handmade sweaters	30	60	100
Wool spinning	10	-	-
Rice/flour mill	3	3	3
Garment	30	60	100
Brick and tile	-	2	-
Bakery	2	5	10
Watch	31	31	31
Leather and shoes	10	25	50
Noodles	5	-	-
Carpets	100	270	540
Foam	-	5	10
Radio-transistor assembly	10	40	100
Pharmaceuticals	50	300	400
Traditional crafts	8	15	30
Dairy	1	7	1
Leather	10	40	60
Tea estate	-	-	200
Total	335	943	1,815

Source: As Table 3.4.

example of the usual trend towards replacement of the lowest skill categories of employees as the technological complexity of manufacturing increases. Subcontracting of jute bag making was also expected to affect female employment; whether this would lead to added female employment in the cottage industry sector was not clear.

(f) Local variations and their implications

The limited size of the sample and the many differences between the industries do not allow a systematic exploration of the differences between the locations. Some of the specific local findings, however, shed light on the overall issue.

The most conspicuous local finding is the high percentage of Indian workers in the factories visited in Biratnagar: out of some 2,400 Indian workers in the sample industries, close to 2,000 were employed in that town. The most important employers by far were two large jute mills. Employers mentioned higher skills as the main reason for employing Indian labour. This may mainly refer to long experience in doing simple jobs: most Indian workers are involved in low-skill production work, but quite a few of them have been with the firms for several decades. The real reasons might be a combination of Biratnagar's location close to the Indian border and the fact that the plants were established at a time when there was little surplus labour in Nepal as opposed to high unemployment in the nearby Ganges valley.

With regard to employment status, wage differentials and promotion Kathmandu stands out as the town where relatively the highest percentages of women have been upwardly mobile in industry; on the other hand there is also a considerable number of industries where female workers are mainly found at the lowest job status levels, and lower pay for equal work was more common than in the other locations. These variations would seem to be a reflection of the fact that in the Kathmandu Valley the industrial structure is the most diversified: on the one hand, the traditional dismal picture with regard to female manufacturing employment status emerges, and is even reinforced; on the other, promotion opportunities are more common than elsewhere.

In addition, in Kathmandu there are greater opportunities for women to enter into low paid repetitive employment, such as wool spinning and processing and knitting, either on a piece work contract basis to take it away at home or to work in the factory location.

Finally, optimism with regard to growth is stronger in Kathmandu and Pokhara than it is in Biratnagar. This may reflect the stronger competition of Indian industry in the latter town, as a consequence of its location. On the other hand, the predominance of the jute factories in Biratnagar's industrial structure may be a factor: the jute industry is not very dynamic and the problem of technical obsolescence is quite serious.

3.2.3 Informal sector enterprises

(a) General structure and employment

In the absence of field survey results that are completely comparable among locations and industries, general statements with regard to the field survey outcome can only be made with many reservations. The size of the

establishments varied considerably, from cottage industries involving a single person to a number of units employing more than 10 people, with an average of 6-7. Although average size is largest in the agro-based industries (which also form the largest single group), the full range of enterprise sizes is to be found in this type of industry as well. Mineral-based (bricks/tiles) industries and weaving are the other significant categories. Here again, average size is relatively large, but one-person enterprises exist as well. On the whole, female employment dominated slightly in the industries visited, with 51.6 per cent of the total work force. There are rather strong differences among the industrial groups. Only in the case of textiles do women dominate the work force, although some units employ more men than women. Mineral- and agro-based show considerable differences among locations and single units. The division between "typical" male or female industries is thus not very clear, at this level, and for the selected industries. As was to be expected, family labour played on important role in the informal sector enterprises. However, there is a considerable difference between enterprises, and most of the larger units would appear to have used wage labour side by side with family labour.

Family income support is a major reason for engaging in informal manufacturing, and in the majority of cases it seems to have been the only source of income for the household. Monthly incomes of over Rs. 2,000 seem uncommon, and in most cases earning this rather meagre income requires full-time work; in only 19 out of the 77 informal sector industries studied had the household a secondary source of income. Part-time industrial activities are common only in the agro-based group - these would mainly concern food preparations (e.g. yoghurt and pickle making) for sale. Earnings in part-time manufacturing can be as low as Rs. 100 per month (see Table 3.8 and Annex Table 7).

Table 3.8. Surveyed informal industries: Main industry groups and employment characteristics

	Full-time involvement	Part-time involvement	Total units
Forest-based	7	1	8
Agro-based	10	12	22
Mineral-based	13	1	14
Weaving related	8	1	9
Knitting related	3	1	4
Stitching/tailoring	6	-	6
Other	11	3	14
Total	58	19	77

Source: As Table 3.4.

The results of the survey of the industries in the informal sector in Kathmandu, Biratnagar and Pokhara seem to indicate that the non-traditional female work generates relatively higher incomes. For instance, the family

workers making agro-based and mineral-based products earned an average of Rs.1,500 and Rs.1,200 per month, respectively. In Kathmandu, those in cotton textiles and sewing earned between Rs.100 to a maximum of Rs.1,500 per month. Those producing woollen goods and sweets had the highest average individual monthly income over Rs.2,000.

The agro-based and family-based labour had lower prospects for income increases while employment outside the home generally fetched higher income. It was evidenced in Pokhara that wage labour outnumbers family labour. Also in the former category there was a considerable number of women employees and their contribution to family income and support was significantly higher than that of family labour. Such indications would be important to be borne in mind in directing the structure and extent of employment in the informal sector.

(b) Constraints

The most frequently mentioned problem of the informal sector entrepreneur was lack of working capital. For small-scale entrepreneurs, it is generally very difficult to get loans from banks because they cannot provide the required collateral; as no business records tend to be kept, they cannot supply other proof of their creditworthiness either. In most cases, when credit cannot be obtained from relatives, private money lenders have to be approached. These, however, are known to charge very high interest rates - rates of 40-50 per cent were mentioned by interviewees.

In the absence of sufficient working capital it also becomes difficult for the small-scale entrepreneur to buy sufficient and good quality inputs and tools and machinery which could increase both the quality and quantity of output. Transport costs (both of supplies and of products to be marketed) can be prohibitive as well. (Some entrepreneurs felt that they could even serve Indian markets if this problem could be solved.) Good market locations (stalls at central urban markets, etc.) are often too expensive as well. These infrastructural problems were not mentioned very frequently, but they are known to be important problems for small-scale enterprises elsewhere. Their not being mentioned may thus well be a subjective matter: many informal sector entrepreneurs may not perceive infrastructural constraints as being of major influence on their earnings, because they see no need (or possibility) to increase the scope of their activities. The fact that most of the interviewees appeared to be satisfied with their work, although the available evidence on incomes shows that these are very low, would support the thesis that many informal sector entrepreneurs are well adjusted to their situation.

Having to work with insufficient, often inferior inputs and capital goods and not being able to supply one's enterprise properly or to serve markets properly because of infrastructural constraints of cour e makes it harder to compete with others in the market. There is strong competition, in many cases, from goods produced in India (in some cases also from Chinese imported products). With its more sophisticated manufacturing sector, India is often capable of producing the same products at a lower price. Although import regulations exist to protect the informal sector, these are easily circumvented, controls being very weak.

With regard to domestic industry, the competitors would in most cases appear to be other informal sector enterprises. There was no widespread knowledge among the informal sector entrepreneurs interviewed of the extent to which other producers were involved in similar activities. In other words, there is generally no systematic attempt to identify and explore market niches. In the absence of opportunities for gainful employment, a great number of people has quite simply started producing for the market in an informal way, and in the case of many products the market has become oversupplied. Estimates of competing informal producers of textiles in Kathmandu, e.g. come to a total of 1,700. Entrepreneurs working for the tourist market moreover have to cope with the seasonal character of tourism in Nepal. Reducing prices in order to increase turnover is not likely to be a solution. Demand for many products is too inelastic, and therefore the only likely result will be reduced intakes, which again constitutes a threat to the continuation (let alone expansion) of operations, or even a threat to (family) survival.

Lack of skilled manpower was not often mentioned as a problem; it is only likely to occur in the somewhat larger units making the more sophisticated products, such as textiles. Much of the production in the large number of food preparations units would essentially be based on skills acquired by women in the household. As with the infrastructural constraints, however, the absence of specially acquired skills, although not perceived as being a problem, may often effectively block development of the enterprise. This is not only a matter of technical, but also of managerial skills: basic knowledge of bookkeeping, of formal credit operations, of legislation pertaining to commercial operations, of marketing might in many cases help to increase the scope of operations, and thus increase income.

Women in the informal sector have been vulnerable to exploitation by buyers and other business people. Often the business establishments in cottage industry give work to women workers on contract or piece work basis and supply the raw materials. The wages offered are low - about Rs.0.75 per yard of cloth (while the material sells at the market for at least Rs.13 per yard). Because of the difficulty of access to raw materials and market outlets women have little or no bargaining power. Similar is the situation in wool spinning, wool knitwear and hoisery.

Finally, constraints are perceived to be caused by Government regulations and policies. For those cottage industries that had registered (or tried to register), the complexity of the procedures involved in establishing or expanding an enterprise had proved to be a great problem. The activities of the Government agencies dealing with cottage industries are sometimes even thought of as actually discouraging or hindering informal enterprise; in some cases the problem was stated in a related but more general way: the relevant agencies do not make enough efforts to build up intensive supportive contacts with the informal enterprises. Government intervention in markets was thought to negatively influence informal enterprise in several ways. First, there are controls and prohibitions with regard to some products, such as home-made alcoholic drinks. Second, import controls on a number of inputs make it more difficult to properly supply the industries (formal sector enterprises also suffer from this problem, but they are often in a better position to deal with it). Third, the absence of Government intervention is quoted by some entrepreneurs as being a constraint to their business; Government purchasing schemes, for instance, should be intensified to provide an extra market

outlet. The market is moreover seen to be insufficiently protected against cheap, often illegal imports which are serious competitors for informal sector products. Finally, although few informal enterprises are registered, and thus not subject to tax, local taxes in some cases were found to affect business operations.

(c) Local variations and their implications

Although the case studies do not allow a detailed analytical comparison of the three locations in the case of the informal industries, some of the specific findings may highlight the various issues with regard to informal sector manufacturing.

Given the fact that most enterprises are family enterprises and that, for socio-cultural reasons, women are less likely to become earners of money incomes, the fairly high percentage of males working alongside women, especially in Biratnagar and Pokhara, is not surprising. It has not been established by the surveys to which extent such male involvement influences female entrepreneurship. It is, however, clear that the remark often made with regard to rural development projects - that support programmes for women cannot be taken without taking the male-dominated environment into account - would to a large extent also be applicable to the urban environment. The much greater involvement of women in the management of Kathmandu cottage industries may point to the much higher degree to which traditional roles of and attitudes towards women have been eroded in the most modernized town in the country.

The growth industries that emerge from the field survey - carpets, part of the textile industries, arts and crafts - are to a large extent concentrated in Kathmandu, which is also the major tourist centre of the country. The town, by virtue of its size and its status as the country's capital, also has a fairly large population segment with higher than average buying power. Finally, it is the town where contacts with overseas traders can be made and where the agencies dealing with exports have their headquarters. The large number of informal sector enterprises to be found in the capital is a clear proof of the attraction it exerts. If the concentration of informal sector growth industries is really becoming as strong as the findings seem to suggest, then special measures may have to be taken to ensure that the informal sector becomes an efficient instrument also for the stated Government policy of countrywide diffusion of industrial activities and employment.

In Biratnagar, the absence of credit facilities for small-scale entrepreneurs was specifically mentioned as a constraint to enterprise development. Credit problems have already been mentioned as one of the major problems that confront the informal sector. The Government has initiated a number of credit schemes for the sector both to replace the reluctant private banking sector and the private money lenders with their prohibitive interest rates. But these facilities are not sufficiently available yet.[1/] Partly,

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[1/] Even when it is available under the Intensive Banking Programme (IBP) women have not been able to avail themselves of the opportunity due to their lack of ownership of property and assets which is required for collateral. This has been reported to be a problem under the Production Credit for Rural Women (PCRW) programme and for women groups under the Small Farmers Development Programme (CWD, 1985).

this is a consequence of the shortage of trained manpower, partly of a reluctance of educated manpower to work outside the Kathmandu area. The Seventh Plan has scheduled a considerable expansion of credit facilities, but at the same time it must be feared that manpower shortages will not make a full realization of planned expansion possible.

(d) Opportunities and prospects

A removal of the various constraints mentioned above was generally considered to lead to much improved output and sales. The main constraints that needed to be overcome were credit and raw material shortages and the limited size of markets. A Kathmandu estimate of the resulting increase in female employment in the sector shows that this might be as high as 15-20 per cent. The major increases would be in textiles, where an additional 400 women might be employed. About half of these would be in the carpet industry.

No single industry emerges clearly from the survey as having the strongest growth potential if constraints are removed. To the extent that data permit, the industries working for those markets where more than average buying power is to be found (e.g. the tourist market) seem to have the highest expectations of expanding their operations - arts and crafts proudcts, souvenirs, carpets and textiles are the most frequently mentioned types of products likely to have a strong demand. Conversely, parts of the industries catering for immediate everyday needs are not thought to have very much growth potential (certain food preparations, shoe making). The limitations of the Nepalese economy, one element of which is the very large number of informal sector enterprises affording only minimal survival to their owners (and their families), keeps at the same time domestic demand low. It may be hoped that the Government strategy of emphasizing fulfilment of basic needs by the year 2000, will significantly alleviate this problem by stimulating the domestic economy. For the present, tourism and the export market (where carpets have done very well) seem to constitute the main growth markets for the informal sector.

The provision in the Seventh Plan for expansion of credit facilities through the commercial banks under the Intensive Banking Programme (IBP) provides a scope for informal sector growth and product diversification. Given assistance and encouragement to women under the IBP, their efforts could be reinforced through special programmes or guidence in entrepreneurship development.

3.3 Female employment in industry-related institutions

There is little information on the role played by women in manufacturing-related employment in the services and Government sectors. As Table 2.3 has shown, there is limited employment of women at the higher professional and technical levels. Significant industry-related employment of women thus seems unlikely.

A recently published statistical table covering approximately 60 per cent of the total number of civil servants in the early 1980's shows that, out of a total sample of 50,306 civil servants, 2,738 were women (see Table 3.9).

Table 3.9. Employment in Ministry of General Administration, by sex

		Male		Female	
		Administration	Technical	Administration	Technical
Special class		64	n.a.	-	n.a.
Gazetted	1st class	157	189	1	9
	2nd class	659	473	17	61
	3rd class	1,691	2,043	42	201
Non-gazetted	1st class	4,079	3,965	223	363
	2nd class	7,588	3,850	267	426
	3rd class	3,770	1,445	238	121
	4th class	1,989	2,050	76	58
	Peon/driver	12,812	740	635	-
Total		32,813	14,755	1,499	1,239

Source: Ministry of General Administration, quoted in SSNCC/WSCC - Statistics on Women in Nepal, 1986.

In the absence of a definition of "administration" and "technical", and of the characteristics of employment at the various grades, it is impossible to come to detailed conclusions about the role of women in the civil service. It is, however, clear that very few women are to be found among senior civil servants; there are none in the "special class" and only 10 among the first class gazetted officers (for gazetted employment, a graduate-level education is generally a precondition). Most women are employed at the higher non-gazetted levels.

More details about female employment in Government institutions and parastatals can be found in a study relying on somewhat older data. As Table 3.10 shows, women were best represented in "cultural" institutions (presumably schools) - a common situation anywhere. Their presence in Government-owned financial institutions and industries, however, was above average as well. The total number of women in Government-owned industries was small, and the study offers no analysis of these data.

A 1982 study investigates in more detail the role of women in the financial institutions. Although no progress was made in the 1977-1981 period in employing women at the top levels (no special class officers, 3 first class gazetted officers both in 1977 and 1981), the number of third class gazetted officers grew from 51 to 94, i.e. from 5.5 to 8 per cent of the total number of officers at that level. Percentage-wise, this was the most conspicuous increase, although the share of female officers remained lower than the share of total female employment in the institution, which grew from 840 to 1,567, or from 9.1 to 11.3 per cent of total staff (Shrestha 1982).

Table 3.10. Women's employment in government and semi-government institutions

Level	Cultural		Financial		Industries		Public services		Trading		Govt. sector	
	No.	% of women in total	No.	% of women in total	No.	% of women in total	No.	% of women in total	No.	% of women in total	No.	% of women in total
Gazetted	5	12.5	88	6.7	7	9.3	23	4.4	13	5.3	197	3.2
Non-gazetted	32	19.6	967	13.1	64	11.8	219	7.7	98	5.9	819	2.4
Lower supporting	2	5.0	111	4.9	12	5.0	30	2.2	11	4.5	444	2.8
Total	39	16.0	1,166	10.6	83	10.2	272	5.8	122	5.6	1,460	2.6

Source: Meena Acharya, "Statistical Profile of Nepalese Women: A Critical Review", The Status of Women in Nepal, Vol.1, Part 1, CEDA, 1979.

The study established that recruitment favours males over females, that promotion to special class was impossible for women, and that men needed fewer years to be promoted to a higher level than women. This is not so much related to better job performance by women as to a disbelief of (male) superiors in the management/decision-making capacities of women and related socio-cultural factors and to the fact that most women have to combine family responsibilities with their professional responsibilities and therefore often are less career-oriented.[1/]

The study offers no analysis of the type of work done by women, but the conclusion seems warranted that women do not hold key positions in institutions, financial or otherwise, which support industrial development.

An exception, at the lower level of the administrative hierarchy, appears to be the Production Credit for Rural Women (PCRW) project, although this is not specifically industry-oriented. PCRW attempts to bring together the extension network and community development expertise of the Women's Development Section (WDS) of the Ministry of Panchayat and Local Development (MPLD) with the credit resources and financial management expertise of the commercial banks. The aim is to establish group formation and input delivery mechanisms that support a variety of projects with and by women. At the village level, a Women Development Officer (WDO) and an expatriate volunteer initiate activities related to credit and community development. they are assisted by Women Development Assistants (WDA's) who will eventually be in charge of activities at the village level. After a few years the WDO will be posted to the district level, from where she will support and supervise village level activities. At the end of 1985 PCRW, with support from UNICEF, had established 32 sites. Several other PCRW sites are supported by USAID. Recently, a development assistance loan from the International Fund for Agricultural Development (IFAD) and a grant component from UNDP has been agreed for expansion of PCRW into an additional 14 districts. This project provides an example of the lead that women, as development officers, have taken in organization/management and in providing delivery services to the rural women in groups, given adequate opportunities and career advancement and decision-making power/authority.

The Association for Craft Producers (ACP) is a newly established entrepreneurial venture which has demonstrated a successful production pattern of arts and crafts with ample prospects for marketing through the work of groups of female and male craft producers. The Association was established with the main objective of assisting and promoting disadvantaged craft producers. It offers the producers with a package assistance of on-the-job and pre-job training, appropriate technology, innovative product design according to market demands, quality control and marketing outlets. Production is performed at two levels. One is in the workshop maintained by the Association in its building and the workers are paid both on time and piece work basis, according to the nature of work. The other is production by

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1/ It has also been found from a recent study on women in financial institutions and the university system that women's motivational level was generally low because of unsatisfactory work conditions and lack of career and promotional prospects. They seem to maintain a status quo in their professional development as there is a serious lack of incentive to perform better (Pradhan, Shrestha, 1984).

home-based workers where a group - generally a group of women - is provided with raw material, design and technology. At this level, in order to ensure efficient management, control and supervision, one of the best women workers is given a status of supervisor to be responsible for a particular group from her village. Through the supervisor quality design, production and delivery is controlled. These women are mainly paid on a piece work basis. They earn significantly higher wages than the outside market rates. In addition, the Association distributes, as incentives, bonus to its members on the basis of efficiency and quality. The Association at present employs well over 100 producers/workers with a multiple variety of products in the fields of block printing, metal items, ceramics, wood workers, paintings, wool spinning and weaving. The products are sold at the domestic as well as export markets.

3.4 Women as entrepreneurs

The concept of women as entrepreneurs has yet to find widespread acceptance in Nepal. During the last years there has been a trend in the capital for women to open their own business, which may have stimulated the provision of training for women entrepreneurs on the part of two or three non-government organizations. In addition, the cottage industries-related organizations have slowly introduced entrepreneurship in their women-specific programmes.

There are ethnic groups where women have traditionally taken on an entrepreneural role. Amongst these are the Buddhist highland groups and the Newars. These groups are distinguished by the fact that their women, on average, spend more time than women from other ethnic groups in activities outside the home farm and domestic spheres, and in the local and non-local markets spheres, often migrating for entrepreneural activities. A larger percentage of families from Buddhist highland groups live in nuclear families and have a greater role to play in family decision-making. The pattern in the entrepreneural groups appears to be that younger women are initiated into the local market whilst older women deal with the non-local market spheres; as women mature (and their children are less dependent upon them) they can afford to move into the 'migratory' sphere of market activities. Thus it would appear that entrepreneurship is passed on from older women to younger women. Annex 2 provides more detail on the cultural, and also on the legal aspects of female entrepreneurship.

It would appear that the number of women who would come under the category of entrepreneurs in a formal sense is negligible. The structure is somewhat better in the informal sector. Currently, amongst those applying for loans for cottage industries 10 per cent are women. However, this may not necessarily mean that they intend to enter the economy as entrepreneurs. They may simply intend to be self-employed for the purpose of household consumption.

The growth in women's self-employment during the past two years (mainly initiated by women in garment and food processing industries) has mainly taken place without any concerted effort or plan. As a result women are involved on such a small scale that most women cannot take advantage of any of the facilities offered by the Government or banks.

Although very few, nonetheless, women are emerging as entrepreneurs and there is a fair degree of awareness, particularly, among the urban elite, on the need and scope for entreprneurial development for women. This is evident from responses shown from some of the organizations.

The Business and Professional Women's Club (BPWC) has since 1975 been active in assisting women in industries and in their professional development. The organization consists of a number of industrialist and business women who can provide guidance and examples for women's entrepreneurship development.

The new Women Entrepreneurs Association of Nepal (WEAN) is being organized to voice women's constraints and needs as entrepreneurs and to constitute a solidarity group to assist and promote fellow women, for instance, in finding/ organizing market outlets, including export outlets.[1/]

A recently formed Women's Entrepreneurship Development Committee under the Federation of Nepalese Chambers of Commerce and Industry (FNCCI) is an expression of a commitment to strengthen employer's contribution and lend assistance to enhance women's existing and potential role as entrepreneurs to the economy. FNCCI in co-operation with the Centre for Women and Development (CWD) has initiated a study on strengthening employer's contribution to enhance women's participation by generating a data/information base on needs, constraints and potential of women entrepreneurs which is to contribute to identification and provision of guidelines for follow up programmes.

1/ Plans are under way for the establishment of a WEAN Co-operative Office which initially will concentrate on collecting from women entrepreneur/ producers and distributing a limited range of products, e.g. household textile goods, food products, stationery and woollen knitwear and other clothing. The WEAN Co-operative Office will also provide advice to the women producers regarding any necessary changes in designs, quality aspects, etc.

International technical co-operation is to be sought, inter alia, for training programmes (marketing, product development, etc.), provision of short-term consultants in specialized fields to advice producers, organization of a national workshop on marketing strategies, preparations for participation in international trade fairs.

4. Prospects, policies and measures for strengthening women's participation

4.1 Overall industrial development policy setting and needs for co-ordination

Increasing the number of women working in the manufacturing sector and raising the levels at which they are employed cannot succeed in isolation from overall policies to strengthen the sector. An accelerated growth of industry may not be enough to create sufficient opportunities for expanded female employment in absolute and relative terms, quantitatively and qualitatively. Therefore, promotion of women's participation in industrial development has to be approached from an integrated and wholistic manner - in that women's integration has to be at all levels of overall policy and strategy formulation, programme design, implementation and monitoring and evaluation.

The overall industrial policy does not address the needs and problems of women in the context of the potential human resources utilization. Unless specific mention/provision to integrate women in the industrial development is made, women's issues get lost in the generality of policy measures. Besides, considering the fact that industrial policies, such as export promotion and comparative advantage strategies, often have had certain adverse effects on women employment, it is recommended that specific policy measures be incorporated to protect women as an especially vulnerable group in the context of pursuance of such strategies.

The new Industrial Policy, issued in October 1987, represents a major attempt to remedy part of the sector's problems, operationalizing a number of policies proposed in the Seventh Plan. To what extent the changes foreseen by the Policy (see Chapter 2) will lead to increased industrial growth and employment is as yet hard to say. The removal of barriers to small-scale entrepreneurship is an important step forward, but as most of these industries are expected to rely on domestic inputs, a major effort will have to be made to increase agricultural productivity (and - to an extent - mineral exploitation). Industrial development therefore is linked to agricultural development - which not only provides industry with a stronger raw material base, but also with opportunities for producing equipment and providing consumer goods to rural areas as living standards increase. The new Industrial Policy, being seen as a major attempt to augment the country's industrial development through a basic needs approach, has in that context also to be more specific in relation to the potential contribution of women.

It is, furthermore, strongly suggested that following the (overall) Industrial Policy of 1987 particular attention be given to the design and development of industry subsector-specific policies and support programmes in the case of selected key industrial subsectors, e.g. certain agro-processing, textile/garments, leather, engineering/metalworking, chemical, pharmaceuticals, essential oils, etc. In this context specific programmes and support measures enhancing the contribution of women to the subsector's development, could be designed. A note providing a proposed framework for industry subsector assessments is provided in Annex 4.

As pointed out in a recent UNIDO report[1/], the country's industrial policy making and execution is also characterized by a certain lack of integration. This was found to be partly the result of the absence of a coherent long-term perspective for industry, partly of manpower shortages and an absence of linkages between the agencies involved in programme formulation and execution. Accelerated implementation of the proposals to strengthen the Ministry of Industry's planning and policy making, execution and monitoring capacity, as indicated in the UNIDO report, would help make support to the sector more efficient. With improved capabilities, the Ministry could also take up the co-ordination of the various projects pertaining to the role of women in industry.

Several additional measures with direct or indirect bearing on the envisaged development of the country's industry and the related contribution of women, may be suggested, such as

- as part of the present policy of stimulating the use of domestic resources, a systematic assessment of inter-sectoral and inter/intra-industry linkages;

- a R and D programme to modify and modernize some of the traditional (crafts) production of items needed for domestic consumption, such as certain textile, basketware, leather and wood items, candles, etc. coupled with an appropriate marketing system, in the overall context of the long-term policy of basic needs fulfilment by the year 2000;

- improvement of quality control and product standardization, especially for export products, e.g. by increasing the scope for activities of the Bureau of Standards[2/] (In addition to the Bureau of Standards an important role can also be played by the Industrial Services Centre in quality control matters by reactivating its Engineering Extension Division.);

- establishment of research priorities (both technical and marketing) for small and cottage industry products with foreign market potential; special support to small and cottage industries applying results of such research (In respect of some 50 industries in Bhaktapur to whom ISC and SBPP have provided technical consultancy, the clear majority of cases have been on design and product development matters.);

1/ M. Satyapal, Ministry of Industry - Organizational structure for planning, policy formulation and monitoring, September 1987 (draft report).

2/ One example of a successful project is a handloom unit with 35 large and small looms in Banepa, run under Sajha Pasal (= co-operative) which under guidance of Colombo Plan advisers - designers and textile engineers - has achieved a high measure of product standardization, cost effectiveness and quality control.

- particular attention in this context should be given to methods (or types of products) which would not require very large capacities. A selective promotion should be pursued regarding items requiring, for instance, extra-wide looms or special colour inputs. A promising area would be internationally marketable items using natural colours.

- better adaptation of educational curriculae to the needs of the economy to make a more efficient use of the limited resources; co-ordination of various technical/managerial training programmes for the same purpose;

- co-ordination of the efforts to promote Nepalese exports to neighbouring countries and overseas, including the undertaking of systematic studies of market potentials.

More specifically, an effective linking of industry-related programmes and projects for women to overall industry sector policies is much needed. In general, it may be said that the plethora of small and large projects that have been implemented in recent years, and, in the case of women's programmes, during the UN Decade for Women, has given rise to concern over the lack of effectiveness of ad hoc projects which function in isolation from mainstream industrial development. It has been observed that resources have been spread too thinly and such projects terminated without ensuring continuity or transfer to local management. Different projects are reported to have been set up either by parallel agencies within the same Ministry or institution, or within special structures that are not eventually incorporated in the main institution. In order to avoid such situations it is necessary to examine strategies for promoting co-ordination and co-operation between programmes.

This does not mean, however, that it is necessarily desirable to have a single, exclusive or centralized authority or a uniform strategy in industry as initiative and diversity needs to be encouraged. The low status of women in industry necessitates a multi-faceted approach to channelling inputs and promoting their participation. Moreover, the Government and NGOs (both statuatory and private sector non-profit organizations) have a complementary role to play in meeting the needs of women in industry.

Within this framework of diversity it is yet possible to minimize waste of resources and to make optimal use of inputs to programmes by evolving mechanisms to achieve some measure of co-ordination and co-operation. The following measures may be considered:

(i) The establishment of an official policy of commitment to increase the participation of women in industry, coupled with the provision of incentives to entrepreneurs to facilitate such industrial development and the support from the banking system will ensure a common national framework.

(ii) While flexibility needs to be encouraged in programme development, all programmes should have links at village and district level with the relevant local/district planning and implementing units so that infrastructural support may be available after external assistance is withdrawn and women's programmes are integrated in mainstream development programmes and not marginalized as peripheral activities.

(iii) It should be possible for all projects to have access to or contribute to national/regional/district training programmes and technological support services in order to ensure maximum use of available resources and facilities and to extend the outreach of these facilities. E.g. the new National Productivity Council could give special attention to industries managed by women or with a high female employment share.

(iv) In this context it is desirable to establish, eventually, resource centres in all regions (possibly through the Women's Training Centre[1/]) and districts (e.g. through the Cottage and Village Industries Department, Cottage and Industry Development Board, Industrial Services Centre, Integrated Hill Development Projects) so that it will be possible to co-ordinate the use of inputs by all programmes in the region/district.

(v) Linkages need to be established between

(a) industries in the informal and formal sectors;

(b) small and large industries through subcontracting and through marketing links; and

(c) public and private sector industries by sharing technical information and skills.

(vi) The informal networking of those involved in women's programmes, INWID, needs to be continued and strengthened in order to facilitate interchange of experience and mutual support.

4.2 Expanding the role of women in the formal industrial sector

The development trends in the Nepalese manufacturing sector clearly suggest growth of female employment. The expansion of the textiles subsector in particular is likely to boost female employment considerably. If, moreover, the measures to increase the growth of the sector outlined in the Seventh Plan and the 1987 Industrial Policy are successful, the share of female employment could rise to above 20 per cent in the early 1990s. The stricter regulations with regard to employment of foreign labour would also help to increase job opportunities for Nepalese workers; the regulations will, however, only be efficient if the domestic supply of skilled labour improves.

But spontaneous growth trends and general policies alone will, however, not result in an optimal utilization of female labour in the sector. Special measures will have to be taken both to provide more employment for women and to raise the status of their jobs. The paragraphs devoted to equal employment

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[1/] This would, however, require a major reorientation of the WTC as its activities at present are very much home science biased and not geared to the needs of women in industries or commercial activities. It might be more practical if linkages be developed with the Small Business Promotion Project (SBPP) as they are imparting training on entrepreneurship development and small business management.

opportunities for women in the Sixth and Seventh Plans show that the Government is well aware of the urgency of the overall problem. However, creation and implementation of manufacturing-specific programmes/measures is needed for faster progress.

The basis for intensified female involvement in industry (as elsewhere in the modern economy) will have to be laid by better general education for women; Section 5 of the present chapter will deal with the measures to be taken to increase the skills and know-how needed in industry, especially in industries which so far have employed few women. The present Section concentrates on possibilities for expanding productive activities which are "women-intensive" and on incentives for employing more women and promoting their careers.

With regard to manufacturing industries where women play an important role, certain progress may be achieved by diversification in export-oriented textiles manufacturing. Structural change in the Indian textile industry would appear to enable Nepalese products to conquer a larger share of the Indian market - synthetic textiles are an example, and this industry has grown rapidly in recent years. Overseas exports of made-up textiles have also done well. These exports consist, however, to large extent of Nepal-based Indian subsidiary companies' exports (whose home company-based exports had been curtailed by the application of US quotas). Nepalese entrepreneurs should be able to further exploit this opportunity. Moreover, overseas footholds can be strengthened by concentrating on high quality items (e.g. incorporation of traditional, unique Nepalese designs in made-up textiles, styled specially for European and North American markets).

One particular area worth further attention is the possible of upgrading the local wool as input to the domestic industry. The spinning equipment used in West Nepal at present is very out-dated and most of the raw wool is exported to India.[1/] The result is that Nepal now imports woolled products from India and also most of the yarn for the woollen carpet production is imported from India. (This notwithstanding, another "niche" product to be further pursued is high quality, skill-intensive carpets using top quality wool imported from New Zealand.)

Although its role is bound to more modest, the leather industry could expand considerably if the right type of quality product could be made available on the tourist market. At present, few quality leather goods items are available although raw materials should not constitute a major problem. It is felt that, given the right support, products could be made available at competitive prices. Lack of expertise and creative designs (and in some cases of proper management) may be the main bottlenecks. A project proposal pertaining to the role of women in the leather industry may be found under Annex 3.1.

The food industry as a whole will probably continue suffering from raw material problems, and does not show great potential for expansion of employment: yet some of the individual industries which are important

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1/ Improved wool spinning wheels have recently been introduced and are now widely used by members of the Association for Craft Producers (ACP). Propagation of use of such wheels can considerably increase the efficiency of wool spinning by women at home or in factories.

employers of women could grow. These include tea processing, bidis/cigarettes, preserves and bakery/confectionery. In the case of the latter two, a careful assessment of the type of products for which demand exists in the urban/tourist (catering) markets would have to be made.

The handmade paper making is a growth industry employing large number of women with large export potential, given the right marketing (as exemplified by the present UNICEF-supported project). Care has to be taken that the raw material supply is obtained in an environmentally satisfactory manner.

The building materials industry, although highly dependent on general economic performance, could expand. The problem is in part the prevalence of wasteful production methods, in part a lack of commitment to use domestic materials on the part of agencies and enterprises involved in infrastructural improvements and buildings. Especially in the building materials field, Government contracting could be an important growth stimulus.

A new challenge and opportunity is presented if it is found that the establishment of an export processing zone (EPZ) (or bonded warehouse-based production) in the Kathmandu area is a practical proposition. As mentioned above, the impetus for new wholly-owned foreign investment in electronics and joint venture investment in clothing and other labour-intensive industries might not be that self-evident. 'International' industry has a wide choice of possible locations. Export-oriented investment of 'standard', labour-intensive type is likely to wish to recruit women. However, given Nepal's geographical position as a land-locked country there is a danger that wage rates would need to be even lower than in other locations to compensate for the higher transport costs and hidden costs inherent in shipment delays. To ensure a reasonable wage level for employees, Nepal may seek to concentrate on 'niche' industries where the likelihood of good margins, and therefore of reasonable wage rates, is better. It would also be worth considering ways for EPZ-firms to be able to directly tap the Nepalese tourist market. Likely product areas include:

(i) Tourism-related products with a high import content:[1/]

- sleeping bags
- anoraks
- sweaters
- rucksacks

(ii) Other products with a high local content (e.g. goods using local materials likely to have favourable backward linkages to agriculture) and suitable for production in large establishments. This would include leather goods which should be of styles considered fashionable abroad.

In addition to products with potential demand from tourists there are good prospects for foreign joint ventures in certain specific agro-based products. These include medicinal herbs, vegetable dyes, essences, essential oils, processed vegetable delicacies (mushrooms, truffles, asparagus), and jute-based products.

[1/] See HMG/MOI Foreign Investment Promotion Division: Nepal - Foreign investment opportunities, Kathmandu, 1987, and listing given in Annex 5 of this report.

Foreign export-oriented firms are accustomed to employ women and much of the employment generated will be for simple and monotonous tasks which can be taught at the work place. There is a demand at present from women for such jobs in Kathmandu. A growth of export-oriented employment in Nepal is then likely to be associated mainly with a growth in employment of women at the unskilled level. Indeed, exploitative conditions created at EPZs, as prevailing in EPZs in some other countries, make it difficult, even with complementary protective measures, to ensure women's interests and protect them from being exploited. Measures would have to be taken to ensure that women obtain access to skilled work and supervisory functions. Care should also be taken that possible linkages with informal sector enterprises employing women are recognized and utilized and that EPZ-industries complement rather than threaten existing enterprises. Indications of some possible project areas for EPZ-manufacturing are given in Annex 3.1.

The Government could also make incentives available to encourage industries to employ women. While the Factory and Factory Workers Act is important in that it provides legal protection to women, it has discouraged enterprises to employ women in a number of cases because of extra costs involved or because of the prohibition of nightwork. It is debatable whether the latter regulation's abolishment or circumvention (e.g. through the provision of dormitories) is socially and culturally desirable. In any case, industries should be encouraged to provide facilities for female employees, especially those with domestic responsibilities.

From the discussion above a number of proposals for specific measures can be distilled, such as

- public sector enterprises setting an example by giving special attention to the recruitment of women and by stimulating upward mobility of female employees;

- public sector enterprises setting an example in the provision of special facilities/employment conditions for women;

- introduction of tax deductions for private firms providing special facilities/ employment conditions for women, or for groups of firms setting up shared facilities;

- inclusion of day-care centres in the design of new industrial estates where industries with a high percentage of female workers are likely to locate;

- particular attention in Government contracting being given to firms with an equal opportunity policy, especially in industries where low female participation is still common;

- publicizing role-models to encourage women to take up careers in industry;

- enforcing equal pay for equal work legislation;

- setting up factory committees representing female employees in work-related issues.

4.3 Self-employment and entrepreneurship

Women are more widely represented in the cottage industries than in the large scale sector. As the analysis above has shown this is not just a matter of numbers; women are also more often found to lead these enterprises, the division between "typical" male and female activities is less strict in some of the industries and the geographical spread of cottage-industry employment is much wider.

International and historical experience shows that the growth of manufacturing production for the local market is associated with a decline of cottage industry. Also, insufficient market knowledge of cottage-scale entrepreneurs often leads to overproduction of certain goods. If this would happen in Nepal, the overall position of women in industry might deteriorate rather than be enhanced. This danger can be overcome by guiding the development of cottage industry into areas which are not directly competitive, e.g. where market gaps exist, and by strengthening linkages between the formal and the cottage sector.

The analysis suggests that in formulating support measures a distinction should be made between household units and the larger, registered, more truly industrial units disposing of special premises and some capital equipment. The distinction is not strict - textile production e.g. takes place both in households and registered small or cottage industries, and while the small industrial units are market-oriented, part of the household manufactures is often sold as well.

Support to women in household units in rural areas is likely to take the form of a range of measures to improve the overall situation of women, household production being a more or less integrated part of daily work. These again should be embedded in general programmes for rural development. Measures which are more specifically industry-oriented could focus on the relationship with the registered cottage industries and formal sector industries, introduction of process/product improvements which can be handled by women in a domestic situation and marketing arrangements.

The registered cottage industries have a considerable development potential. They have been shown in many cases to be more efficient producers than large-scale producers and have made a major contribution to Nepal's foreign exchange earnings. Although both household and registered units can produce for local/domestic and export markets, the former would be more important as an element in the attainment of the goals of the basic needs strategy, whereas the latter's contribution to exports can be considerably expanded. If its further growth is properly stimulated, it could not only become a much more important provider of paid female employment than it is at present, but it would also serve as a breeding ground for female manufacturing entrepreneurs.

The present trend towards decentralization and the much simplified administrative procedures for the smallest industrial enterprises should provide such a stimulus for the cottage industry sector. Product reservation schemes may help to protect traditional sources of income for women, especially in household industries. As cottage industry tends to be strongly area-specific, the schemes should be carefully adapted to make the most of whatever "natural specializations" exist in specific regions or localities.

On the other hand, experiences with product reservation schemes of other developing Asian countries should be studied in respect of problems as well as possibilities.

While product reservation schemes would primarily relate to the domestic market, other interesting schemes with export-orientation are being pursued in developing Asia. The Sri Lankan Export Production Village (EPV) scheme, for instance, could provide a new way for cottage industries to penetrate the overseas market. The EPV scheme was introduced in 1981 to increase exports through village-based production by economy and export markets overseas. After a study of potential export markets, links were established between the selected village and specific exporters in the formal sector. The village produces the goods for the exporter. The latter, where necessary, provides new inputs. As incentives a cash grant and a five year tax holiday are given. In the village, an EPV (People's) company was established. The Export Development Board (EDB) of the Ministry of Trade and Shipping pays a certain percentage of export earnings to the EPVs. Profits are to be distributed among producers/ shareholders. The shareholders are expected to be represented on the Board of Directors of the EPV. (A note on the Sri Lankan EPV scheme is given in Annex 6.)

By linking the village informal sector with the formal sector, the EPV programme has 'institutionalized' village based production and made optimal use of resources and technical inputs. The export potential of rural products has been tapped and the country's foreign exchange earnings increased. In the Sri Lankan context women have constituted the major workforce. They are enabled to continue their domestic and economic roles by promoting home-based production, extension of agro-based activities and the introduction of new skills without organizing labour in factories and without disruption of family life. Economic activities and incomes have increased in low income families. Nevertheless, some drawbacks should be noted as well. As in the case of EPZ-activities, care has to be taken to ensure fair renumeration practices, in particular when the mode of production in the EPV is subcontracting or 'putting out' to piece-rate workers (as in the electronics and umbrella production EPVs in Sri Lanka). Moreover, the export market for some products is unstable, and the women have little bargaining power vis-à-vis the exporter as they have not organized themselves. Supportive facilities are absent, and women are often forced to utilize unpaid family (or even child) labour to produce enough for survival. It is possible, however, for the EDB to intervene and impose minimum wages/prices and satisfactory working conditions and thus eliminate some of these problems. While these negative features of the EPV scheme should be kept in mind, it should be possible to identify in Nepal fields of village-based production (e.g. knitwear) that could be expanded or organized to meet export demand. It would, however, be primary requirement that an agency, such as the Trade Promotion Centre, first identify markets overseas and specific exporters in Kathmandu who could channel product to these markets. A project proposal is given in Annex 3.2.

At an industry-specific level, special attention could be given to agricultural and forest products, textiles and leather, pottery and metal working.

The first category - agricultural and forest products - could exploit Nepal's unique geographical/ climatological situation to tap the tourist/export market. These industries, traditionally large employers of women could produce juices and preserves of fruits not available in the

tropical parts of India (e.g. apples), exotic spices and certain types of health food. Certain technological aspects (suitable for consideration under a TCDC programme) should be looked at, e.g. the making of simple apple-peeling equipment (along lines of such equipment existing elsewhere in Asia) or the acquisition of top quality mango drying technology.

Forest products would include medicinal herbs essential oils and vegetable dyes. Research and development and strict quality control would be essential; this could involve a growing number of women, partly as a result of their traditional experience with these products. It would also give employment for the growing number of female pharmaceuticals graduates. Finally, with an improved raw material basis, the considerable demand potential for handmade paper could also be better exploited.

In the textiles and leather industry several possibilities for linkages among cottage industries and with large-scale industries in "female-intensive" products exist. Jute factories could provide inputs for special jute craft products for both domestic and tourist/export markets. Similarly, improved wool spinning facilities in west Nepal could ensure the local cottage industries' raw material base; at present, raw wool is exported to India. The leather industry project referred to under 4.2 also contains a cottage industry linkage component. In the made-up textiles industry, the role of women in the provision of tailor-made or specially designed clothing could be expanded. The planned Training and Design Centre for the textile industry could assist here by making facilities available for (future) self-employed women. Generally speaking, however, the number of cottage scale producers in textiles may be larger than the market warrants, and although such market niches as are identified should be exploited, it may be necessary to device measures to direct self-employment to other industries where competition is less serious (see also specific project proposals presented in Annex 3.3).

In the pottery industry, the successful Bhaktapur GTZ-supported ceramics project[1/] with the Department of Cottage and Village Industries could serve as an example. Here again, product and design improvement would be important; just as in the brick industry, more efficient equipment is also needed. Potentially, there is a large domestic market; special items for the

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1/ Under the project common facility services are provided by means of a high temperature firing kiln and technical advice is given on glazing technology, design and product development, etc. Appropriate machinery for clay-processing, product-forming and kiln system was developed (and the equipment was made - under guidance by the GTZ-advisors - by a metal shop in Patan). The project's immediate target group is some 1,500 familes in the Bhaktapur area, with prospective families in the rest of the country being more than 20,000. For instance, a successful small village kiln for individual potters has been developed and is being used by established village industries. The project has a client list of about 30 prospective companies who are given advice on planning, product line etc. Six small-scale or cottage ceramics industry have been established and two other industries are using technology of the project - one producing ceramics machinery and other using kilns and burners in an experimental bronze foundry. (See further "Ceramics Promotion Project - Project Profile", November 1987. Note prepared by the project management.)

tourist/export markets should also be considered. The pottery industry is one example where exploring new outlets would help to preserve traditional skills (and at the same time these skills are upgraded) where competition from new products (e.g. plastics) has eroded traditional markets

Metal working is a craft which has traditionally not employed many women. (This notwithstanding, e.g. in the small workshops in the Patan industrial area, a considerable number of women are employed in particular with polishing and finishing tasks.) Consideration should be given to the introduction of carefully designed programmes which would help women to enter skill categories in such industries where they have, hitherto, hardly been active, provided that these industries have good growth potentials. Jewellery and high-quality metal statuettes, etc., fetch high prices in the tourist/export market. Unique design (e.g. closely following traditional ethnic patterns) is essential.[1/]

Finally, more attention is needed to the development of female entrepreneurs. In this process the cottage industry can serve not only as a breeding ground, but also as a stepping stone towards large-scale manufacturing. Here again general education is essential, as the widespread illiteracy among women would be one of the major obstacles to obtain formal credit. On the other hand, women's access to entrepreneurship development projects should be improved. The various Seventh Plan projects do not provide special stimuli for women to take part in industrial entrepreneurship development. Bilateral and multilateral cottage industry/entrepreneurship programmes could make special efforts to involve more women as well (see Section 4.6). Entrepreneurship project concept proposals, involving international co-operation are given in Annex 3.4.

Specifically, as women's self-employment and entrepreneurship is already an acceptable practice and constitutes an existing, most important potential, particularly among the Newars, women in the various communities should be encouraged to the utmost to develop their entrepreneurial skills in a more systematic and organized manner. In order to do this following steps should be considered:

(i) Organize women (in the communities) to be aware of their potentials and capabilities and assist them in developing this capability.

(ii) Give the women access to necessary management and technical skills for business management.

(iii) Make arrangements that would facilitate for the women to obtain credits. One alternative would be the provision of loans against group liability in the absence of individual collateral. This would mean that the women would have to be organized in groups. This is one way that the Agricultural Development Bank of Nepal has tried to promote credit programmes for women groups under the SFDP. A second way would be to have an institutional linkage developed with Women's

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1/ It may be noted that under the current UNDP-project 'Cottage and Small Industries Development, Phase II' (DP/NEP/86/007) short-term export market information specialists and design consultants will be provided, i.a. in the field of jewellery.

World Banking and its loan guarantee programmes. This could conceivably be built into the present World Bank/IDA small and cottage industry loan guarantee scheme for Nepal. A third way would be to involve the employers organizations and related organizations to that they can assist in negotiating with financial institutions by virtue of their already established business relations.

(iv) Monitor the progress and assist in adressing any problem that women may face in the course of operation of their enterprise.

Other concrete measures for self-employment and entrepreneurship from which women could specially benefit would include

- more detailed research (industry and area specific) on women in cottage industries by such institutes as CEDA, including evaluation of present cottage industry development programmes and assessment of the (potential) role of women in them in order to design new/better ways of increasing female self-employment;

- arrangements whereby Government purchasing contracts and private industry contracts serve as collateral for loans to cottage industries; and extending the facilities of the Production Credit to Rural Women (PCRW) to cottage industries (PCRW credits are at present essentially in livestock industry only);

- special attention to female involvement in entrepreneurship training schemes; and support for new initiatives such as those of the Women Entrepreneurs Association of Nepal (WEAN) (see page 49);

- assistance in transferring technological and organizational improvements to the cottage industry sector which increase its productivity without negative consequences for employment. The Women's Polytechnic and the Women's Training Centre (WTC) (see 4.5) could eventually play a key role here, and involve their trainees in applied, industry-oriented research; and assistance in setting up cottage industries applying such research;

- provision of collective basic infrastructure to groups of cottage enterprises, preferably near market centres (experiences elsewhere in South and East Asia should be studied for this purpose);

- specifically, consideration to be given to the suitability of specially promoting women-led and/or women-intensive small or cottage industries in a certain area or industrial estate, such as (a small part of) the Balaju Industrial District in Kathmandu, including, possibly, the setting up of special sheds or buildings for these industries;

- assessment of both the failures of and potentials for group-oriented cottage industry programmes (co-operatives,[1/] bulk buying arrangements, collective marketing, etc.) and for, so called,

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1/ One interesting successful co-operative project is the handloom unit at Banepa (ref. footnote 3 on page 51). Another successful example is the Wood Carvers' Co-operative Society at Bhaktapur.

'industrial village' projects in less developed districts with inherent traditional skills in some crafts-oriented production (basketware, textiie products, ethnic jewellery, etc.);

- in above assessment, particular attention to be given to the possibilities of the Government support being focused on guarantees relating to the cost of "the risk of specialization" (e.g. innovative approaches, measures to ensure product excellence); and

- publicizing female role models to stimulate entrepreneurship, especially in non-traditional industries.

4.4 Industrial support institutions and services

The preceding analysis has given indications of both the relative weaknesses of the industrial support institutions and services and the near absence of women in key positions within them. Under Section 4.1, policies and measures to strengthen the institutional infrastructure for industry in general have been given some attention. The present section will concentrate on the potential for female employment in such institutions and on special institutional support for women. Increasing the female presence in such institutions not only provides more women with paid employment: it has been shown that women are very often more efficient in delivering services to other women. There is thus a double advantage, from the point of view of human resource utilization, in a stronger female presence in the institutions.

Given the relatively high skill levels needed for work in the institutional support agencies, the increase of female participation in general education is an essential pre-condition (see Section 4.5). As in manufacturing itself, attitudes and in some cases laws will also have to be changed to enable women to make careers, and facilities may have to be created for women with domestic responsibilities. It may not be possible to create part-time/work-sharing employment arrangements at the higher levels in these institutions because the shortage of qualified personnel, especially among women, is likely to last for years to come.

Female personnel now engaged in support services, such as the Women Development Officers/Women Development Assistants of the PCRW project (see Section 3.3), should not only been given sufficient opportunities to progress to positions with increasing responsibilities and decision-making powers; their experience could also be of great benefit to women entering institutional employment. Moreover, this would provide "models" (just as in the case of female manufacturing entrepreneurship) which would help to strengthen female self-confidence. The various rural credit and savings schemes now being implemented in Nepal could - after an evaluation of their performance and expansion potential - be given the additional task of providing finance to (groups of) self-employed women.

The strengthening of the institutional infrastructure is of vital importance for the pursuance of the country's development efforts and the enhancement of the skills and contributions of the country's human resources in total. Attention to the potential contribution of women would in the first hand be embodied therein. However, in parallel with the overall development/human resource support, it might be useful to draw up special

programmes for women to offset past neglects by bringing forward untapped capacities and skill potentials. In pursuing such programmes, however, certain caution may have to be exercised. For instance, the existence (as at present) of a variety of organizations that do cater specially for women, and the lack of co-ordination between them, ties up human and material resources in headquarter's functions while the efficiency of support delivery is reduced.

The creation of new institutions to support female manufacturers might be especially warranted in certain areas. Marketing and credit co-operatives are a point in case. For cottage-scale female entrepreneurs, as pointed out above, it is often particularly difficult to obtain credit[1/] and to find outlets beyond the local market. In both cases, they may have to rely on a local trader who is likely to charge high interest on informal loans and to utilize his marketing monopoly to depress prices paid to producers. Evidence from many countries shows that the co-operatives are most likely to succeed where certain traditions exist in this respect. On the other hand, some of the comparative advantages that women are often considered to have for assembly-type work - capability for teamwork, diligence, a conscientious attitude - would precisely be the characteristics needed to make this type of co-operative a success. An interesting development in this field is the small marketing organization for women now in the process of being set up in Kathmandu by some experienced female entrepreneurs. If it is a success, it could conceivably grow into an institution providing other types of services to female entrepreneurs as well.

Specific measures to improve female contribution/role in industry-supporting institutions would include

- accelerated implementation in Government agencies of measures based on the proposals for equal opportunity employment in the Sixth and Seventh Plan (e.g. by giving preference to women in the case of equal qualifications; strengthening female presence in key ministries/ departments such as the Department of Industry and the Department of Cottage and Village Industries of the Ministry of Industry, and the Ministry of Panchayat and Local Development);

- provision of guidance for new female employees in support institutions by experienced female staff members;

- better access of women to in-house training courses;

- at the National Productivity Council (to be set up), special attention to be given to the furthering of productivity and technology improvements in 'women-intensive' fields, and, possibly, a special cell be established with focus on productivity aspects related to women in industry;

1/ An innovative approach is used for the provision of credits under the earlier-mentioned Production Credit for Rural Women (PCRW) programme, through the establishment of self-reliant groups (see "Report of the Review Mission of the Production Credit for Rural Women (PCRW) Project in Nepal", October 1985).

- to increase the potential impact of women-oriented programmes following measures may be taken: full support be given to the co-ordination of efforts of organizations, such as SSNCC/WSCC, the Nepal Women's Organization, the Business and Professional Women's Club, and institutions/programmes, such the Association for Craft Producers, the Center for Women and Development, the Integrated Development System and the Income Generation Programme under SATA and FNCCI. Particular attention be accorded to possible "manufacturing-orientation" of the various programmes;

- evaluation of Nepalese experiences/traditions with regard to various types of economic group activities (e.g. rotating credit) with a view to forming viable co-operatives in manufacturing-related activities (possibly calling on the expertise of such bodies as Women's World Banking[1/]).

4.5 Education and skills development

Because of their key role at the interface of cultural/social change and economic development, educational improvements have been referred to already at several points in this chapter. The present section concentrates on education and training having a direct bearing on industrial development.

One important immediate measure which is hereby suggested, is the making of, firstly, an annotated inventory of all the educational and skill development programmes that are currently carried out in the country, not only those that are women-specific but also those which are general, for men as well as for women, and, secondly, a review of all these programmes in the light of their appropriateness for the industrial development skills needed.

Above all, there has to be a general assessment of the training needs both for women workers and women as entrepreneurs. Only on that basis can a realistic curriculum be prepared relating to various types of demand for industrial skills and an incorporation be made into respective educational and training programmes. Besides, there has to be continuous review and modifications of the trianing programmes according to the changes in the technology and skills requirements of the industry.

Important steps forward have been taken with regard to training women in informal sector skills during the recent years. The UNDP and World Bank/IDA supported cottage and small scale industry project referred to above is a clear example. Under the Seventh Plan, a number of other training programmes is being implemented as well.

An institution whose widespread activities do not yet include cottage industry training is the Women's Training Centre (WTC) of the Ministry of Panchayat and Local Development. It has provided orientation courses to its own extension workers and has organized training programmes for rural women in leadership and promoted supplementary income generating activities. WTC has

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1/ Women's World Banking is a non-profit Netherlands foundation formed in 1979 with the objective to advance and promote entrepreneurship by women, particularly those women who have not generally had full access to the services of established financial institutes.

many advantages as a national training agency for women. It has an infrastructure comprising a centre near Kathmandu and three important regional centres in Pokhara in the Western Region, Dhankuta in the Eastern Region and Surkhet in the Mid-West Region and all centres have residential facilities for trainees. It has also a network of trained women workers in the 75 districts who conduct field training programmes, including mobile training, and whose outreach ensures a multiplier effect. Its constraints are partly the consequence of conceptual limitations: its income generating skills programmes have been influenced by the concept of women as supplementary income earners in a society in which women are in reality the backbone of the subsistence economy. The Centre is now trying to shift its orientation to meet the needs of women as independent economic actors. This would, among others, involve improved and more extensive industrial training programmes, covering both technical and managerial skills and linking such training courses with (self-)employment schemes. It would, however, need further resources in order to carry out such programmes. To this end is suggested that

- policy directives be made to diversify WTC's training activities (for details see Pradhan, B., Evaluation of the Panchayat Training System, IDS, 1984);

- training needs assessments be made and programmes designed accordingly[1/];

- the WTC manpower resources be strengthened (incl. retraining and upgrading); and

- the WTC facilities be upgraded to suit the type of new training programmes to be introduced.

The possibilities for women to receive training in Nepal for higher level technical skills are very limited so far. As indicated in Section 2.9, vocational and technical training courses for women are hardly ever industry-oriented. To ensure that women can in the future participate at all levels, however, these skills are essential and a major expansion of the number of women studying engineering and physical sciences would be needed as well. The planned Women Polytechnic discussed in Section 2.9 could be given a more prominent role in providing industrial training than is foreseen at present. It could, among others,

- provide courses in the technologies of industries which so far employ few or no women and are likely to play a key role in future development: chemicals, metals and electronics;

- design on-the-job training courses for women in industry; and

- link its training schemes to self-employment projects for trainees, especially in the industries for which market niches have been identified, such as leather goods, ceramics, interior decoration (cf. Section 4.3).

1/ Specifically, it is suggested that linkages be established with the Small Business Promotion Project (SBPP) in order that the valuable experiences of their training programmes to be fully taken into account.

Specifically, the textile/garment industry is interested in Government-sponsored training in the fields of design and cutting.[1] (The DCVI does not presently provide training in these fields.)

Other suggestions for the formal sector would include

- equal access to on-the-job training (in combination with equal opportunity legislation this should help to prevent "technological degrading" of female labour when structural change occurs);

- establishment of special training courses at technical schools in local areas with modern industry concentrations, focussing on local technical skills needs; and

- more attention to manpower needs assessment in order to be able to formulate efficient technical education programmes.

For informal sector training, the WTC and its sub-centres could reorient their activities and, in particular

- they could develop a design unit at WTC or, alternatively, provide facilities for its women workers to be trained at a National Design Centre (if established) in order to improve the quality and economic viability of its traditional weaving, knitting and handicraft training programmes. Such programmes should be structured to meet identified market needs;

- they should work in close liaison with the relevant departments of the Ministry of Industry and the Trade Promotion Centre to keep abreast of development perspectives, market trends and emerging employment opportunities and to restructure their training programmes when necessary; and

- mobile training programmes in the villages could be conducted by women workers from the Regional Centres, district women workers and district resource personnel. All such training programmes should be geared to production targets.

4.6 International co-operation

While many of the recommendations outlined above are primarily aimed at measures to be taken by national policy-makers and concerned institutions, there is at the same time scope for international co-operation on these issues. International organizations such as UNIDO as well as bilateral development agencies can improve and expand the programmes for economic advancement of women, e.g., through

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[1] According to the CEDA-study 'Garment industry in Nepal' (prepared by Dr. Khem Bahadur Bista and completed in July 1987) about 40 per cent of the garment industry employees engaged in skilled jobs come from India. On basis of the study's sample survey 6 out of 7 cutting/designing jobs in the garment factories were held by Indian nationals.

- assessment of the role of women in existing industrial projects and strenghtening their role in therein;[1/]

- more extensive co-ordination and exchange of experiences in the various projects for women run by international agencies;

- systematic attempts to contract female entrepreneurs to provide material inputs used in these projects to the extent they can be provided locally;

- market development monitoring and assisting female entrepreneurs to meet changes in demand (e.g. through design improvement);

- giving more attention to international developments with regard to female labour and enterpreneurship in the formal sector;

- close monitoring of technological changes at the international level affecting branches with a predominantly female labour force (e.g. textiles/clothing) so as to ensure an early awareness of emerging threats and potentials; and
- stimulating a more intensive exchange of experiences among women in the industrial sector at the regional level (SAARC, ASEAN).

With a view to the formulation and development of proposals for international technical assistance, an identification and conceptual presentation has been made of a number of possible areas for projects with large women employment potential in both the formal and informal sector. These are presented in Annex 3.1 - 3.4 of the report, and include

- strengthening of formal sector employment of women in Kathmandu tourism/export-oriented industries;

- an export production village pilot project in Kathmandu Valley, concentrating on textiles;

- a series of rural village self-employment schemes, covering both food processing and textile industries; and

- pilot projects for production-related female entrepreneurs training.

[1/] Particular attention should be given to the potential of women entrepreneurship and other contributions of women within the framework of the "Cottage and Small Industries Development, Phase II", project of UNDP (DP/NEP/86/007) with the Cottage Industry Development Board and the Trade Promotion Centre.

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Annex tables

Annex Table 1. Structure of manufacturing output, value added and employment, Nepal, 1965/66-1984/85
(output and value added: Rs. million, employment: number)

Industries/ Product groups	1972/73 (Census)			1972/73 (Census)			1976/77 (Census)			1981/82 (Census)			1984/85 (Census)		
	Gross output	Value added	Employment	Gross output	Value added	Employment	Gross output	Value added	Employment	Gross output	Value added	Employment	Gross output	Value added	Employment
1. Food and allied	724.9	97.8	5,734	1,098.6	134.2	22,836	1,719.5	171.9	20,835	1,358.5	360.0	25,463	978.1	152.9	14,406
Grain/oil milling	704.9	97.5	4,828	1,050.7	122.8	18,909	1,621.2	138.8	15,171	1,163.9	285.4	16,188	832.7	117.3	26,106
Bakery/confectionary/ biscuits	1.7	0.4	115	14.4	1.7	518	14.7	6.4	908	23.0	8.3	1,427	36.1	7.0	1,673
Tea processing	0.4	n.a.	36	1.4	0.3	1,040	3.2	0.4	1,984	7.6	1.9	2,838	8.0	5.0	3,666
Sugar refining/khandsari	18.0	n.a.	755	32.1	9.5	2,369	38.5	13.7	1,958	61.3	32.3	3,666	28.1	10.8	2,327
Dairy products	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	(27)	(5.4)	(644)	22.9	7.5	763	n.a.	n.a.	n.a.
Animal feed	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	(14.8)	(7.24)	(170)	79.9	24.6	581	27.7	2.4	282
Noodles	-	-	n.a.	-	-	n.a.	-	-	n.a.	n.a.	n.a.	n.a.	36.4	7.7	194
Fruit processing	-	-	n.a.	-	-	n.a.	-	-	n.a.	n.a.	n.a.	n.a.	9.1	2.7	158
2. Drinks and tobacco	33.9	7.8	835	53.7	13.5	5,862	67.8	14.4	6,887	320.4	169.9	11,087	356.3	185.4	14,751
Bidi	17.1	7.4	768	21.8	9.5	4,462	24.8	5.4	5,008	179.5	89.0	9,867	194.3	81.2	12,110
Cigarettes	17.1	n.a.	n.a.	(31.9)	4.0	(1,400)	(33.7)	(3.7)	(16,00)	128.1	75.5	762	130.0	95.6	1,870
Beer/soft drinks	0.3	0.4	67	n.a.	n.a.	n.a.	(4.3)	(2.3)	(129)	n.a.	n.a.	n.a.	16.2	5.4	396
Liquor	0.6	0.4	n.a.	n.a.	n.a.	n.a.	5.0	2.9	150	12.8	5.5	458	15.8	3.2	375
3. Textile and wearing apparel	64.3	12.3	4,573	62.5	11.7	6,585	87.9	33.7	9,158	212.8	87.5	13,911	411.6	142.3	22,976
Carpets and rugs	n.a.	n.a.	n.a.	2.9	0.9	379	3.9	1.2	1,298	60.8	23.5	2,674	83.6	25.6	9,200
Textile/yarn	9.4	n.a.	279	6.0	1.8	364	28.1	10.0	2,545	37.8	7.2	3,059	162.0	67.0	4,876
Knitwear	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1.0	0.5	112	20.4	8.2	1,145	10.2	3.9	900
Jute goods	54.7	12.3	4,294	50.1	(8.6)	4,932	(50.9)	(20.2)	(4,866)	52.4	29.2	6,024	79.2	29.9	5,987
Footwear/tanning	0.2	n.a.	n.a.	3.5	0.9	310	4.0	1.8	3.4	41.4	19.4	1,009	71.6	16.0	2,013
4. Wood, paper and printing	22.4	8.0	1,726	54.1	22.9	3,004	72.9	22.2	5,971	198.9	70.6	7,267	143.7	47.5	14,536
Saw mill	13.5	4.1	403	15.3	3.4	833	32.0	7.8	1,343	95.7	19.9	964	38.9	7.4	500
Wooden furniture	4.4	2.0	567	16.9	11.5	1,370	26.3	9.1	1,751	69.3	33.6	3,080	67.6	16.2	10,647
Matches	n.a.	n.a.	n.a	n.a.	n.a.	n.a.	5.0	2.8	688	8.1	4.1	642	13.2	5.9	1,841
Paper manufacturing	n.a.	n.a.	n.a	n.a.	n.a.	n.a.	0.4	0.2	290	1.7	0.7	258	4.9	0.6	158
Printing	4.5	1.9	756	21.9	8.1	801	7.0	2.1	1,721	24.2	12.2	2,323	13.1	4.5	930
Wooden parquet	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3.4	1.9	77
Plywood	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	(1.2)	(0.14)	(178)	n.a.	n.a.	n.a.	2.6	1.0	383

Annex Table 1 (cont'd)

Industries/ Product groups	1972/73 (Census) Gross output	Value added	Employ-ment	1972/73 (Census) Gross output	Value added	Employ-ment	1976/77 (Census) Gross output	Value added	Employ-ment	1981/82 (Census) Gross output	Value added	Employ-ment	1984/85 (Census) Gross output	Value added	Employ-ment
5. Plastics, chemicals & pharmaceuticals	3.4	n.a.	43	2.5	0.2	124	8.2	3.2	743	63.5	22.9	832	159.4	38.2	3,955
Soaps	2.0	n.a.	43	2.5	0.2	124	2.8	0.4	186	13.9	5.2	285	15.1	5.7	1,150
Drugs/medicaments	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3.5	2.2	255	5.3	1.4	83	6.5	2.4	512
Plastics/PVC/chemicals	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	1.9	0.8	302	44.3	16.3	464	67.8	10.2	1,711
Batteries	-	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	70.0	19.9	582
6. Non-metallic mineral products	13.4	5.3	1,466	37.7	28.4	5,300	47.1	16.9	8,081	42.3	16.0	16,634	59.2	24.6	17,517
Bricks/tiles	11.9	5.3	1,317	37.7	28.4	5,300	(27.9)	(7.6)	(6,551)	30.1	10.5	16,150	39.2	19.0	16,220
Cement/cement products	1.2	n.a.	62	n.a.	n.a.	n.a.	(17.4)	(8.9)	(437)	12.2	5.6	484	17.4	3.8	872
Other non-metallic products	0.3	0.1	87	n.a.	n.a.	n.a.	(7.9)	(0.4)	(1,093)	n.a.	n.a.	n.a.	2.6	1.9	425
7. Metalic products	16.7	2.1	615	20.1	7.2	1,246	23.5	5.53	1,389	62.3	19.4	3,843	91.1	25.1	4,286
Metal utensils/metal products	9.3	n.a.	84	8.1	1.0	413	8.7	2.6	503	18.8	6.9	811	25.3	6.3	1,499
Fabrication/repair	2.6	1.4	338	0.9	0.6	189	0.7	0.4	248	1.7	1.1	331	14.3	6.6	532
Metal furniture	3.6	n.a.	n.a.	9.0	4.3	438	11.6	2.4	487	12.0	2.4	546	7.7	4.8	1,151
Iron/steel goods	-	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	29.3	9.0	1,982	31.1	4.2	935
Jewellery goods/curios	1.1	0.7	193	2.2	1.3	206	2.5	0.2	151	0.4	0.1	173	n.a.	n.a.	n.a.
Non-steel rerolling mills	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	12.8	3.2	169
8. (a) Watch assembly	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	9.7	2.0	66
(b) Dot pens	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	6.4	2.9	105
9. Activities n.e.s.	n.a.	n.a.	n.a.	98.4	36.4	2,577	137.3	52.2	7,340	34.1	14.2	1,143	17.1	4.9	380
Grand total	878.5	133.3	14,992	1,427.5	254.4	47,534	2,164.1	319.9	60,404	2,292.8	760.5	80,180	2,232.7	625.9	112,979

Source: UNIDO (Madhukar Rana, Deepak Thapa), Role of Women in Nepal's Industrial Development: Status, Constraints, Opportunities and Prospects, Volume I, November 1987.

Annex Table 2. Total capacity and capacity utilization in manufacturing sector, 1984/85
((Rs. million deflated at 1970/71 prices)

Subsectors/products	Total capacity (Rs. million)	Capacity utilization (Rs. million)	Capacity utilized (per cent)
Food/allied	1,856.9	932.6	50.2
Grain/oil milling	1,682.1	832.7	49.5
Bakery/confectionery	52.2	36.0	69.0
Tea processing	31.6	8.0	25.4
Sugar	36.5	27.7	76.0
Drink/tobacco	424.6	356.3	83.9
Bidi	158.4	194.3	122.7
Cigarettes	170.5	130.0	76.0
Beer/soft drinks	36.8	16.2	44.0
Liquor	59.2	15.8	27.0
Textile/wearing apparel	684.1	411.6	60.2
Carpets/rugs	140.4	83.6	60.0
Textile yarn	238.6	162.0	67.9
Knitwear	48.2	10.2	21.2
Jute goods	162.2	79.2	48.8
Footwear/training	94.7	71.6	75.5
Wood/paper/printing	355.5	137.7	38.7
Saw mills	214.4	38.9	18.1
Wood furniture	98.2	67.6	68.8
Matches	16.7	13.2	78.8
Paper manufacturing	7.5	4.9	65.6
Printing	18.7	13.1	69.9
Plastics/chemicals/pharmaceuticals	128.0	89.4	69.8
Soaps	42.3	15.1	35.7
Drugs medicaments	7.1	6.5	90.8
Plastic/PVC/chemicals	85.2	67.8	79.6
Non-metallic mineral products	95.7	59.2	61.9
Bricks/tiles	59.3	39.2	66.1
Cement/cement products	27.0	17.4	64.3
Others non-metallic products	9.4	2.6	28.2
Metal subsector	332.8	78.3	23.5
Metal utensils	208.1	25.3	12.16
Fabrication/repair	12.8	17.3	111.0
Metal furniture	18.2	7.7	42.0
Iron and steel goods	93.7	31.1	33.2
Total	3,877.9	2,065.5	53.2

Source: UNIDO (Madhukar Rana, Deepak Thapa), Role of Women in Nepal's Industrial Development: Status, Constraints, Opportunities and Prospects, Volume I, November 1987.

Annex Table 3. Growth scenario: Manufacturing sector 1985/1986 and 1989/90
(Output and value added: Rs. million, employment: number)

Industries/ Product groups	1985/1986 Gross output	1985/1986 Value added	1985/1986 Employment	1989/1990 Gross output	1989/1990 Value added	1989/1990 Employment
Food and allied	922.3	144.4	35,370	891.2	153.9	41,552
Grain/oil milling	816.4	166.9	26,836	754.2	115.5	29,971
Bakery/confectionary/biscuits	38.9	7.8	1,840	53.0	12.1	2,694
Tea processing	9.3	6.3	4,069	16.8	11.4	6,177
Sugar refining	27.7	11.0	2,324	26.4	11.4	2,315
Animal feed	30.0	2.4	301	40.7	3.5	395
Drinks and tobacco	379.4	104.2	15,115	717.7	374.3	20,747
Bidi	233.2	97.4	13,199	483.5	202.0	18,632
Cigarettes	146.3	107.6	1,916	234.3	172.3	2,115
Beer/soft drinks	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Liquor	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Textile and wearing apparel	512.6	182.9	27,165	1,380.6	521.7	58,412
Carpets and rugs	111.1	33.8	12,006	345.4	102.5	34,820
Textile/yarn	213.0	90.4	5,558	636.9	300.3	9,388
Knitwear	13.8	5.1	1,170	45.9	14.6	3,342
Jute goods	82.4	33.3	6,076	96.4	51.5	6,449
Footwear/tanning	92.3	20.3	2,355	256.0	52.9	4,413
Wood, paper and printing	154.8	48.8	16,679	239.0	62.3	30,367
Saw mill	42.0	7.9	478	57.1	10.4	401
Wooden furniture	75.9	28.1	12,616	120.2	37.1	24,878
Matches	14.8	6.5	2,080	23.9	9.1	3,391
Paper manufacturing	6.7	0.7	144	22.9	1.1	103
Printing	12.6	4.2	942	10.6	3.5	992
Plywood	2.9	1.4	419	4.3	1.1	602

Annex Table 3. (Cont'd)

Industries/ Product groups	1985/1986 Gross output	1985/1986 Value added	1985/1986 Employment	1989/1990 Gross output	1989/1990 Value added	1989/1990 Employment
Plastics, chemicals & pharmaceuticals	109.3	24.2	4,075	248.3	77.2	8,823
Soaps	17.6	7.6	1,391	32.4	23.0	2,982
Drugs/medicaments	6.9	2.6	563.	9.0	3.4	825
Plastics/PVC/chemicals	84.8	14.0	2,121.	206.9	50.8	5,016
Non-metallic mineral products	61.5	24.5	19,106	73.1	24.7	27,283
Bricks/titles	39.4	18.3	17,777	40.0	16.0	25,650
Cement/cement products	19.4	4.2	950.	29.9	6.5	1,392
Other non-metallic products	2.4	1.9	379.	3.2	2.2	241
Metalic products	53.6	20.2	3,678	94.0	36.4	5,253
Metal utensils/metal products	27.9	7.3	1,648	40.8	3.3	2,414
Fabrication/repair	18.0	8.0	580	46.0	18.1	818
Metal furniture	7.6	4.8	1,260.	7.2	5.0	1,811
Iron/steel goods	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Jewellery goods	0.2	0.04	190.	0.07	0.01	210
Non-steel rerolling mills	-	-	-	-	-	-
Grand total	2,193.0	649.9	121,188	3,643.9	1,250.9	192,437

Source: UNIDO (Madhukar Rana, Deepak Thapa), Role of Women in Nepal's Industrial Development: Status, Constraints, Opportunities and Prospects, Volume I, November 1987.

Annex Table 4. Training programmes: Overall targets and progress in Sixth Plan, 1980/81-1984/85

Name of project		Training	Achivements	Remarks
Labour supply centre:	Hetaura	2,500 persons	1,494 persons trained up to 1985/86	
	Nepalgunj	2,500 "	1,207 "	
	Butwal	2,500 "	1,305 "	
	Itahari	2,500 "	446 "	
	Dhangarthi	2,500 "	312 "	
	Jhapa	1,000 "	181 "	
	Pokhara	1,500 "	Not yet established	No budget
	Surkhet	2,000 "	Not yet established	No budget
Sub-total		17,000 "	4,945	
Vocational Training Centre, Rani		Mechanical training: 40 persons	Mechanical and other: 223 persons trained	
V.T.C. Hair dressing		250 persons	279 persons trained	
Employment Research and Development Centre		(a) 10 pilot schemes (b) 5 population manuals (c) 5 surveysh	(a) 12 labour market studies (b) 4 labour training effectiveness studies (c) 13 curriculae developed (d) 13 skill development surveys	
Population, education on organized sector		(a) 3 seminars (b) 36 trainings	(a) seminar - 1 (b) training - 89	

Source: National Planning Commission - The Seventh Plan, 1985-90.

Annex Table 5. Training programmes of labour supply centres: Persons trained during the period 1980/81-1983/84

	Hetaura	Nepalgunj	Butwal	Ithari	Dhanagari	Jhapa	Total
1. Carpentry	132	152	191	21	44	17	557
2. Masonry	121	103	145	-	14	-	383
3. Earth-cutting	-	49	-	-	-	-	49
4. Brick laying	358	156	257	32	51	-	854
5. Short-term	78	103	222	40	49	-	502
6 Press compositor	120	102	69	-	-	6	297
7. Biri-making	165	224	-	-	-	-	389
8. Boiler operator	133	-	-	-	-	-	133
9. spinning and weaving	90	115	115	-	-	11	371
10 Tyre resoling	7	-	5	-	-	-	12
11. Stone-cutting, slating	57	-	-	-	-	-	57
12. Cutting and tailoring	42	42	58	32	41	11	225
13. Cane works	-	-	-	50	-	-	50
14. Apprentice training	16	-	-	51	-	-	67
15. House wiring	-	10	-	-	23	11	44
16. Cycle, rickshaw repairing	-	-	-	-	-	10	10
17. Earthen pots and works	-	-	-	-	-	-	-
18. Others	22	8	-	-	-	-	30

Source: National Planning Commission - The Seventh Plan, 1985-90.

Annex Table 6. Occupational distribution of employment in selected industries, 1982

	Percentage of male employment	Percentage of female employment	Total	Percentage female in total	Index of concentration
Administration	14.43	6.24	13.46	5.49	0.47
Director, manager, assistant manager	0.75	0.53	0.72	8.64	0.73
Personal officer, secretary	0.14	-	0.12	-	-
Sectional head, administrative officer and other officer	0.21	0.23	0.21	12.50	1.06
Supervisor and assistant supervisor	0.26	-	0.23	-	-
Accountant and account officer	0.87	0.38	0.81	5.49	0.47
Typist, stenographer	0.18	0.90	0.27	40.00	3.39
Storekeeper and assistant storekeeper	0.55	0.30	0.52	6.90	0.58
Head assistant and other assistant	0.29	0.07	0.27	3.33	0.38
Watchman, guard, peons, timekeeper equivalent	4.98	0.45	4.44	1.20	0.10
Driver	0.05	-	0.04	-	-
Clerk, cashier assistants	2.35	2.03	3.58	6.72	0.57
Others	3.79	2.03	3.58	6.72	0.57
Production	85.57	93.76	86.54	12.82	1.08
Higher level technical & highly skilled	2.79	1.50	2.63	6.78	0.58
Planning, mill, supervision & production manager	0.03	-	0.03	-	-
Engineers	0.75	0.15	0.68	2.63	0.22
Chemist	0.21	0.23	0.21	12.50	1.06
Doctor	0.03	-	0.03	-	-
Technologist	0.25	0.07	0.23	3.85	0.32
Shift-incharge, supervisor, senior foreman	0.23	-	0.20	-	-
Factory overseer	0.06	-	0.05	-	-
Laboratory technician	0.10	0.38	0.43	33.33	2.82
Quality controller	0.08	0.15	0.09	20.00	1.69
Compounder	0.06	-	0.05	-	-
Shoe last designer	0.02	-	-	-	-
Shoe maker	0.21	0.38	0.23	19.23	1.63
Other highly skilled	0.74	0.15	0.67	2.67	2.26

Annex Table 6. (cont'd)

	Percentage of male employment	Percentage of female employment	Total	Percentage female in total	Index of concentration
Skilled and semi-skilled	64.43	58.16	63.69	10.81	0.91
Supervisor, foreman, assistance foreman	0.90	0.15	0.81	2.20	0.19
Pusher	0.11	-	0.10	-	-
Nurse	-	0.15	0.02	100.00	8.47
Breakerfeeder	0.41	0.83	0.46	21.15	1.80
Cuts repairer	0.18	0.68	0.24	33.33	2.82
Handsewer	0.04	3.76	0.48	92.59	7.85
Dresser, weaver, knitter	1.04	9.18	2.00	54.22	4.59
Dyer & skilled textile worker	0.31	-	0.28	-	-
Boiler attendent, technician	0.24	0.07	0.22	4.00	0.34
Mechanics, setter turner, engineering fitter, mechnical operator	0.86	-	0.76	-	-
Blacksmith, forger, plumber, pipefitter	0.28	-	0.25	-	-
Welder, flame cutter, metal mander, caster and metal worker	0.31	-	0.28	-	-
Brick layer, mason, carpenter, cable jointer, wood worker	1.06	0.38	0.98	4.54	0.38
Electrician and electric worker	0.38	-	0.34	-	-
Baker, compositor, artist, binder	0.16	0.15	0.16	11.11	0.94
Dairy worker	0.56	0.15	0.51	3.51	0.30
Engine driver, vehicle driver, helper	0.34	-	0.30	-	-
Other skilled and semi-skilled	57.16	42.66	55.44	9.11	0.77
Unskilled	18.36	34.09	20.23	19.95	1.69
Total	100.00	100.00	100.00	100.00	100.00

Source: Shrestha 1985.

Note: The concentration index indicates whether women are overrepreesnted (>1) or underrepresented (1) in relation to the overall share of female employment in industry.

Annex Table 7. Distribution of informal sector work between main and secondary activities in Kathmandu, Biratnagar and Pokhara

Kathmandu

Category of activity	Main	Secondary	Total
Forest-based	3	1	4
Agro-based	6	5	11
Mineral based (curio)	4	-	4
Weaving related	4	-	4
Knitting related	1	1	2
Stitching (tailoring)	3	-	3
Other activities	8	3	11
Total	29	10 -	39

Biratnagar

Industrial activities	Activity		Employment					Family support[a]	
	Main	Secondary	Male	Female	Total	Wage worker	Family worker	No.	Income (average)
Forest-based	2	-	10	-	10	2	8	5	300
Agro-based	2	3	32	26	58	15	43	7	1,500
Mineral-based	5	1	33	18	51	4	47	7	1,200
Weaving, knitting	1	-	-	3	3	1	2	4	2,000
and stitching	3	-	13	8	21	-	21	6	700
Others (candle)[b]	1	-	-	-	-	-	-	-	-
Total	14	4	88	55	143	22	121	29	-

[a] Number of family members supported and average monthly income.
[b] Failure.

Annex Table 7 (cont'd)

Pokhara

Industrial activities	Activity			Employment			Type of labour (workers			Family support	
	Main	Secondary	Total	Male	Female	Total	Wage labour	Family labour	Total	Family member	Household income (%)
Forest-based	2	-	2	-	5	5	-	5	5	5	100
Agro-based	2	4	6	28	7	35	21	14	35	14	40
Mineral-based	4	-	4	10	-	10	6	4	10	7	100
Weaving related	3	1	4	4	25	29	20	9	29	10	50
Knitting	2	-	2	2	10	12	4	8	12	6	100
Shoe making	2	-	2	3	-	3	-	3	3	7	100
Total	15	5	20	47	47	94	51	43	94	49	-
Percentage	75.0	25.0	100.0	50.0	50.0	100.0	54	46	100.0	-	-

Source: Same as Table 3.4.

See Annex 7 for detailed list of these activities.

Annex 2

Cultural and legal aspects of the position of women in the Nepalese economy - A brief overview

Broadly speaking, Nepalese society is patrilineal. This is reflected a.o. in property legislation. By tradition, it was the reponsibility of the sons to take care of their parents in old age, to perform ancestral rites after their death and to continue the lineage. Family property being the economic basis for carrying out these duties, it was passed on from father to son. Upon marriage, a woman will receive articles for personal use; in very rich families she may receive a piece of land. Otherwise she has few claims on property. On divorce, a woman will lose her share in family property, even if the husband is the guilty party - in that case she is entitled to limited compensation provided that she remains alone.

A number of laws has been passed to strengthen the legal and economic position of women. Under a 1975 law e.g. an unmarried daughter is entitled to an equal share of parental property on reaching the age of 35. Legistation which has a bearing on female employment has also been passed. The Factory and Factory Workers' Act e.g. entitles women to certain facilities and provisions (such as maternity leave) and prohibits night work for women.

There are, however, many indications that women can often not avail themselves of the legal rights they possess to advance economically. Customary law or social and religious rules may prove stronger than any legislation passed by the Government and may strongly circumscribe the social and even geographical mobility of women. Especially in the more remote rural areas law enforcement is weak; moverover, women play no significant role in the law enforcement machinery. Finally, it is a matter of prestige for most males to be able to provide for the whole family; the low status consequently accorded to female wage labour or independent economic activities may be said to be not only a Nepalese but a world-wide phenomenon, also to be found in highly developed countries. The Seventh Plan formulates the dilemma quite strongly:

> "The women of Nepal have not been able to fully take part in the development activities .... The superstition prevalent in the society and negative thinking have been major obstacles in mobilizing women to participate".

With regard to negative thinking, there is a fairly common attitude among employers that women are inferior in many manufacturing jobs, or are simply inqualified to do jobs demanding certain levels of technical skills or know-how. It is quite usual for women to be paid less for doing essentially the same job as men, although this is illegal.

Prevalent as these constraints to female participation in the economic process may be, there are some exceptions. First, the rigidity of traditional law and custom varies considerably among ethnic groups. The major example is provided by the Highland Buddhists. Among the Buddhist Highland families women generally have a higher status. Women are considered as individuals in

their own right, which is partly a reflection of religious practices, partly of the fact that in the harsh mountain environment the contribution of women to family survival is absolutely essential. Female entrepreneurship is far more common among these groups.

Second, the mobility of women increases among the urban educated. This is quite conspicuous in the largest urban centre, the capital city of Kathmandu. There are, however, signs that this increase in mobility among some groups, combined with the country's problematic economic situation, may lead to a "conservation backlash" among others. Certainly the modern media, concentrated in the capital city, have reinforced the conservative image of women as being predominantly destined for domestic tasks.

Annex 3.1

Possible areas for projects with large women employment potential in formal sector manufacturing for tourism and overseas markets

Project title: Female employment in tourism/export-oriented industries.

Target population: Women in the Kathmandu area.

Background

The development of tourism gives the opportunities for significant growth in manufacturing and associated activities:

- Clothing and equipment for tourism activities. Equipment is of special importance to adventure type tourism;
- Processed food and drink (see also informal sector projects) Quality control, skill development and modern technology are most essential;
- Building materials and supplies for hotels and lodging houses;
- Handicrafts for holiday purchases;
- Purchases of consumer goods which are available in the tourist's own country, but which are purchased whilst on holiday because this is the time when tourists have leisure to select goods. (This is a fast growing area.)

(a) Sports goods production by export-oriented joint venture, possibly at Kathmandu EPZ

These opportunities could be realized as part of the EPZ scheme to be implemented at Kathmandu. While tax and infrastructure facilities would generally help to attract foreign entrepreneurs to the EPZ, special efforts to ensure the establishment of high-quality sportswear and equipment producers would create employment for women that is potentially better paid and has more spin-off potential than is usually the case at EPZs.

To ensure that women fully benefit from the potential for following steps should be taken:

- firms enjoying EPZ privileges must adhere to minimum wage rates and conditions for workers;
- scholarships should be offered to women in specialized design aspects of clothing and equipment, and in quality control (for sportswear equipment there are possibilities for specialized engineering applications).

Potential EPZ firms would also be foreign companies designing specialized leather goods suitable for sale in developed countries.

(b) Specialized production of high-quality fashionable leather goods

The Bansbari Shoe and Leather Factory near Kathmandu would have the capacity to expand into leather products such as handbags, calf and suede garments, leather furniture parts, etc. Potentially, 60 per cent of the labour force could consist of women. A special marketing facility would have to be established to serve the Kathmandu tourist market and overseas markets. This agency (possibly set up with NGO assistance along the lines of the UNICEF-supported handmade paper project) would also be responsible for product design (in which women could develop their creative skills).

Arrangements linking the factory to cottage/SSI production could include:

- subcontracting parts of the work needing little capital equipment to women working at home or at the factory premises (this is presently being done in the case of shoe uppers during peak periods);

- contracting small-scale specialty producers to utilize the tanning facilities during weekends. This would both increase the factory's capacity utilization and solve the problem of cost-efficient tanning for SSIs.

In general, specialized workshops for high-fashion design in clothing, knitwear and leather goods, aiming at the tourist/overseas market, could potentially be an important source of employment and could also help to raise skills. Measures should be taken to ensure training and technical and design assistance. There are possibilities of backward linkages with rural craftswomen.

Annex 3.2

Concept of an export production village pilot project

Project title: Export Production Village scheme for woollen knitwear production.

Target population: Self-employed women in a rural area in the Kathmandu Valley.

Background

The Export Production Village (EPV) scheme was introduced in Sri Lanka in 1981 to increase exports through village-based production by linking them with formal-sector exporters.

By linkirg the village informal sector with the formal sector, the programme has 'institutionalized' village based production and made optimal use of resources and technical inputs. The export potential of rural products has been tapped and the country's foreign exchange earnings increased. In the Sri Lankan context[1/] women have been major beneficiaries as their traditional participation in agriculture and rural industries has been extensive. The scheme has in particular enabled women to continue their domestic and economic roles by promoting home-based production, extension of agro-based activities and the introduction of new skills without organizing labour in factories and without disruption of family life. Economic activities and incomes have increased in low income families.

Pilot project elements

It is suggested that assistance be provided in a pilot effort for the establishment of a production (village) group of women in the production of woollen knitwear in a selected rural area in the Kathmandu Valley. The group of some, 20 women should be supported (on a commercial basis) by one or several entrepreneurs/ exporters/marketing outlets in Kathmandu, if possible women entrepreneurs. These Kathmandu-based entrepreneurs would, under the overall guidance of the Cottage and Village Industry Department of the Ministry of Industry, assist in the organizing of the group, supply it with raw materials (wool, dyes etc.) and take care of the sales of the products. The Trade Promotion Centre would assist in identifying export outlets. Great care would be taken to select the right entrepreneurs, and in this co-operation with the GTZ-supported Small Business Promotion Project would be sought.

1/ See Annex 6 for a detailed note on the Sri Lankan Export Production Village scheme including a brief assessment of its potential for replication/adaptation in Nepal.

Annex 3.3

Project profiles for female self-employment in the cottage industry sector 1/

PROJECT NO.1

Project title: Food processing-cum-basketery industry for women

Target population: Tharu women of Sukrawar (Dang Deukhuri)

Background:

Subsistence agriculture is predominant in the area, but there is insufficient land. Although the standard of living consequently is low, people are disinclined to migrate. Women's work consists to a large extent of food processing activities, leaving little time for gainful side activities. Women prefer to do the processing themselves because they can sell the by-products of processed items or use them to feed animals. Also, there would be no profitable way for women to utilize the time saved by using outside mills. A women's co-operative food processing and basketry industry could boost the Tharu household economy by raising productivity and increasing sales of sideline products.

Objectives of the project:

1. To enable women to organize themselves into co-operative groups for mutual support and collective activity related to foodgrain processing, thus enhancing their economic self-reliance.

2. To provide institutional and material support and management and marketing skills.

Potential market:

Mainly local and surrounding villages.

PROJECT NO.2

Project title: Women's co-operative for fibre processing

Target population: Kham Magar women of Thabang (Rolpa)

Background:

Climatic factors lead to fluctuating agricultural incomes in the Kham Magar area. Added income from e.g. animal husbandry cottage industry or migrant labour is required for most villagers to meet their basic subsistence needs.

1/ Projects number 1-6 are based on proposals prepared by CEDA; projects number 8 and 9 on proposals prepared by CWD; and project number 10 on a proposal prepared by Oriental Consultants in Kathmandu.

During the slack agricultural season women spend considerable time in cottage industries. They make a number of wool products, mainly blankets. Kham Magar women have developed good skills in making wool products and there is a good market for such products. Promoting wool production, however, is difficult for socio-economic and climatic reasons. Hemp products might be a way of boosting women's incomes. Hemp can be collected where it grows wild, or be grown on marginal land. Hemp fibre yields a sturdy cloth, like jute. Hemp, however, is stronger and longer lasting than jute and people usually pay a higher price for handmade hemp bags than for jute bags. Hemp cloth is popular throughout the Rapti Zone, and the investment for its production is low. If technical and other support for hemp fibre processing is provided, Kham Magar women could make considerable economic gains without degrading the local physical environment.

Objectives of the project:

1. To enable women to organize themselves into co-operative groups for mutual support and collective activity in processing hemp fibre.

2. To help women creating economically productive and environmentally sustainable employment.

3. To provide institutional and material support and management skills.

Potential market: Throughout the Rapti Zone.

PROJECT NO.3

Project title: Sericulture

Target population: Parabatiya women of Bakundol (near Kathmandu)

Background:

In the area, both pasture and forest areas are disappearing rapidly. Water shortage is also a limiting factor for agricultural activities. Bakundol has no tradition of female entrepreneurship, and social cohesion has become very weak as a consequence of migration. Sericulture could help to strengthen the local socio-economic situation without making great demands either on the natural environment or on technical and managerial knowledge. It is very labour-intensive and would provide employment for women in cultivating and harvesting mulberry trees, rearing silkworms, spinning silk yarn and eventually weaving. In addition, the mulberry trees must be extensively pruned twice a year and the cuttings would provide a good source of fuel wood.

Objectives of the project:

1. To draw women into the local market economy by creating gainful employment opportunities within the village.

2. To create an ecologically sound economic activity.

3. To strengthen the local community.

Potential market: National wide.

PROJECT NO.4

Project title: Women's co-operative weaving centre

Target population: Women of Baragaon (Mustang District)

Background:

In the area, the agricultural season is relatively short and production is constrained by the shortage of seasonal labour and water. Most agricultural work takes place during summer leaving the winter slack season for migratory trade and other activities. Married women normally do not migrate: husband and wife are likely to live separately for most of the winter. Women have good skills in weaving woollen goods. If weaving can be given a more established form, it will provide an opportunity for sustained livelihood even to the poorer strata of the population. Woollen blankets, rugs and sacks are used extensively in Baragaon. Blankets and mufflers are also bought by Nepalese and Indian pilgrims and foreign tourists. The promotion of weaving, based on available skills and existing cultural traditions, will especially facilitate the entry into gainful activities for the poorest.

Further, if weaving could be done in a more organized form, raw materials could be obtained more efficiently and cheaply (bulk buying) and time consuming processes such as cleaning and dyeing of wool could be done more efficiently. As part of the project a building designed to provide adequate light and conserve radiated heat in winter should be built to enable continuous production.

Objectives of the project:

1. To enable women to organize themselves into co-operative groups for mutual support and collective activity in processing wool by providing institutional and material support and management skills.

2. To make women, especially of the poorer strata, economically self-reliant.

3. To discourage out-migration of people by providing an established form of livelihood.

Potential market: Local, national and international.

PROJECT NO.5

Project title: Vegetable growing and packing industry for women (Sirsia village)

Target population: Maithili women of Sirsia (Dhankuta District, Janakpur)

Background:

Maithili society is an inegaliterian and sexually stratified society where women in general have lower status than men. Women participate in most of the activities carried out on the farm or at the household level. Their work burden is higher than that of men, but they have little control over household income. Improving the economic status of women is hence a must to fulfill the aims of an equitable and dynamic society.

This can be achieved by providing income generating opportunities for women over which they have control. Introduction and/or promotion of vegetable growing and packing industry could be a viable avenue of income generation. A major part of the vegetables demanded in the nearby city of Janakpur and surrounding areas is at present supplied by Indian traders. An organized campaign for vegetable growing and packing with distribution of appropriate inputs coupled with appropriate extension services and marketing arrangements could help the women of Sirsia to gain a foothold in the market.

Objectives of the project

1. To provide technical skills and leadership training together with appropriate institutional and material support to women vegetable growers towards increasing their production and the marketability of the product.

2. To enable women to organize themselves into co-operative groups for mutual support and collective activity in purchase of supplies and marketing of products and also in self-evaluating skill.

Potential market: Janakpur.

PROJECT NO.6

Project title: Vegetable growing and packing industry for women (Bulu village)

Target population: Newar women of Bulu (Chapagaon)

Background:

Bulu is a peripheral village of Kathmandu Valley and the economy is subsistence agriculture. Indigenous technology in agriculture has been developed to its limits and the village produces one of the highest average yields of paddy per unit of land in Nepal. Bulumi never allow their land to lie fallow for more than a month or two; they raise at least two main crops and two subsidiary ones. Women are integral part in their agricultural production.

Women of Bulu are hardworking, forceful and assertive and exercise their influence in the community. But despite these attributes, women have less opportunities of off-farm employment. Prevailing wage rates in and around the village discriminate against women and discourage them on taking wage employment. Weaving is also not so attractive because of the poor pay and competition from the Kathmandu market. The main source of income the Bulu

village women have comes from selling vegetables. Vegetable cultivation is completely under control of women, right from selecting the type of vegetables to be cultivated to marketing them. But the vegetables are presently grown only on a kitchen garden scale. It is deemed a most promising possibility to organize growing of vegetables in Bulu on a bigger scale in view of its proximity to Kathmandu and Patan cities where the demand for vegetables is high.

Objectives of the project:

1. To provide technical skills and leadership training together with appropriate institutional and material support to women vegetable growers towards increasing their production and the marketability of the product.

2. To enable women to organize themselves into co-operative groups for mutual support and collective activity in purchase of supplies and marketing of products and also in self-evaluating skill.

Potential market: Local and the cities of Patan and Kathmandu.

PROJECT NO.7

Project title: Common purchasing scheme for garments producers.

Target population: Self-employed women in the garments industry.

Background:

Nepal's garments industry is to large extent a cottage industry and is one of the country's major employers of women. It has considerable export potential. One of the problems of the cottage industries is the high cost and irregular supply of inputs. Female producers of garments in a specific locality could pool their resources to buy inputs in bulk. This would lower the cost of inputs and, as a common purchasing scheme is likely to have more leverage in the market, the regularity of supplies can presumably also be improved.

Objectives of the project:

- To create a co-operative buying business;

- To assess the common needs for essential inputs;

- To make it possible for local garments producers to procure materials at low cost and of required/specified quality thereby enabling them to compete with other (factory establishments) garments producers in the short-term and promoting the development of the industry in the long-term.

PROJECT NO.8

Project title: Community-based income and employment promotion for women through sericulture and silk industry

Target population: Hill districts of Nepal

Background:

Sericulture projects in Asia have been instrumental in providing not only much needed contributions to the national economy but also a direct benefit to the many women who work through a production chain that runs from mulberry bush farming to cocoon rearing and spinning of silk yarn and ultimately the manufacturing of silk fabric.

In the current day market place a metre of silk fabric fetches from NRs. 500 to NRs 3,000 and above, depending on quality and texture. Raw silk is also in heavy demand for trendy mode clothings in the urban areas. The silk industry can bring 300-400 per cent value added on its original cocoon price and is considered one of the best ways of high value specialized farming.

The Nepali silk can find very good market in the country's currently booming garment industry as well as in exports of raw silk to India.

Objectives of the project:

The objectives of this 5-year project is to establish in selected communities in the hill areas an integrated sericulture and silk industry. In an average village (Panchayat area) there are around 400 households. The rugged topography of the hills in Nepal not only makes a village (Panchayat) difficult to cover but it also requires qualified logistical support and planning (of mini mountaineering expeditions). It is therefore envisaged that the project may be designed to cover 200 households in one village in the first year. Thereafter 200 more households will be included each year until the project covers 1000 households and 5 Panchayat in a cohesive and defined geographical area, i.e. a valley, along a river or a watershed. Suitable districts are Makwanpur, Nuwakot, Sindupatchowk, North Dhading or West Palpa.

The first year would involve the establishment of a base camp in the selected district; training/up grading of staff of the implementing Nepalese consulting institution, e.g. Centre for Women and Development (CWD); and the carrying out of at least five "village silk industries animation camps" of 10 days each for 200 households in groups of 40 households. The organizing of such 'camps' has been perfected in the Palpa District in the last 5 years and CWD possesses the know-how and curriculum. Focus will be on the four steps of sericulture and silk industry

- mulberry tree growing/cutting/transplantation
- cocoon rearing and its care
- silk yarn spinning
- silk weaving

During the first year, furthermore, an in-depth assessment of the sericulture and silk industry potential in Nepal will be carried out.

At the end of the first year a detailed budget for the next 4 years should be finalized with a provision for a community-run egg rearing plant and a nursery to supply young mulberry saplings.

PROJECT NO.9

Project title: Community-based income and employment for women through wool spinning

Target population: Mid-hill areas around the Kathmandu Valley

Background:

Highland wool has long been an important resource for the mountain people in Nepal. Wool from highland sheep has been brought to various uses by the hill population, especially by the women. It has been woven into blankets, jackets, caps, carpets and 'pari pakhi' through the ages. The 1960s saw a spate of specific woollen items being introduced and produced in Nepal. The importance of woollen carpets and woollen garments gradually increased and they are now the most important overseas exports of the country (US $270 million in 1987) and the second foreign exchange earner (after tourism). The carpet industries account for some 60,000 jobs to carpet weavers, spinners and twiners, most of whom are women.

As the export boom continues more and more women workers will be required to spin and twine wool in order to feed the carpet industries in the Kathmandu Valley. The carpet manufacturers are finding it increasingly difficult to find enough spinners and weavers to meet the international demand for carpets. As, on the other hand, a large scale influx of hill population into the valley would not be desirable, efforts must be directed to provide income and employment avenues and opportunities to the women in their homestead. This project intends to set up spinning groups in the mid-hills bordering on the periphery of the Kathmandu Valley, i.e. Nuwakot, Kaverepalanchowk, Lahtpur, Makwanpur, etc.

Objectives of the project:

The spinning project will train women in groups of 10 through a master trainer. The training will consist of 10 days on wool processing and spinning and 10 days entrepreneurship training. The groups will be taught how to wash, dry, blend, pick, card and spin the wool and finally, market it to carpet manufacturers through a leader women entrepreneur. Ten groups will be trained per year in a specific geographical location. The project might have a total duration of 5 years.

PROJECT NO.10

Project title: Training and Design Development Centre for powerloom activities at cottage industry level)

Background:

Nepal was self-sufficient in textile production till the end of the 19th century. The whole production system, including fabric designs, was community oriented. The imports of textiles at present is worth 3 to 4 billion of rupees annually because the traditional production system has been completely destroyed in the first 3 decades of this century. Self-sufficiency in this core sector can not be attempted by installing centralized high technology systems in the organized sector due to the problems related to availability of capital and technical expertise and social consciousness. One answer is the mass participation of small entrepreneurs in "cluster co-operatives" (financed under the World Bank supported Cottage and Small Industry Project). The concept of working entrepreneurs and different cluster groups catering for different but specific markets will restore the social dislocation affected during first half of the century. In few years the powerlooms will proliferate along the high ways as the electricity supply position is consolidated. The design and training centre is the catalytic agent that will start the chain reaction. The Oriental Consultants have prepared a proposal for assistance in training a number of personnel in different skills related to weaving, craft and fabric design.

Objectives of the project

The overall objective of the project is to accelerate the production of textile through the mobilization and co-ordination of available resources to organize powerloom activities at cottage industry level in the form of "cluster co-operatives".

The immediate objectives are:

1. To train national manpower to establish 25 cluster co-operatives initially.

2. To provide designs to the scattered clusters for producing socially acceptable fabric designs with a view to facilitate marketing.

Activities:

The sponsors will establish the first pilot project with the aid of an Industrial House. The pilot project will train personnel to establish three secondary clusters with specific locational expercises. For the weaving craft the centre will provide the theoretical exercises, the secondary and the subsequent cluster co-operatives will provide practical exercises. As for the design development the project will do research in the traditional design bases, harmonize it with the present trend and supply them to the cluster co-operatives.

The training and design development centre will function till January 1991 in the original form when the second phase of the project will start needing expansion and additional inputs to start handloom activities in the areas that have no electricity supply with a view to produce export quality handloom fabrics for the growing garment industry.

Annex 3.4

Project concepts for the promotion of female entrepreneurs in industry

PROJECT NO.1: Pilot project to train and support female entrepreneurs.

Target population: Prospective female entrepreneurs in rural areas and provincial towns.

Background

A number of institutions is involved in developing entrepreneurial skills for industry. These programmes have generally not attracted many women. In order to increase their participation, there would, moreover, appear to be scope for co-operation among agencies. As an example, the Small Business Promotion Project, supported by the German Agency for Technical Assistance (GTZ), seeks to identify, select and train potential entrepreneurs, to assist existing small business owners through consultancy services, to offer continuing technical advisory services, and to provide credit facilities through a revolving fund in a local bank in the seven locations in which the project is based. The programme has been open to both men and women but only 15 per cent of the entrepreneurs selected or assisted by the project have been women. Another rural entrepreneurship programme is run by the Department of Cottage and Village Industries. Its Cottage and Small Industries Project (supported by IDA/World Bank and UNDP) enables commerical banks to support entrepreneurs in small scale industries, and provides entrepreneurship and extension services that assist entrepreneurs by linking them to larger Nepali companies. The Trade Promotion Centre provides information and technical services to export-oriented industries, such as textiles, readymade garments, household decorative textiles.

Project pilot elements

The experience of these programmes indicate that women have specific constraints and therefore need more initial support. It will, therefore, be useful to implement a pilot project to train and support women entrepreneurs:

- The project could be linked to a Government institution and to an international development assistance agency, such as an multilateral agency, e.g. UNIDO, or bilateral e.g. the German Agency for Technical Assistance (GTZ).

- It could utilize the structures developed by the GTZ Small Business Promotion Project to identify and select potential women entrepreneurs, to offer continuing consultancy services and on-going technical services, and to provide credit through a revolving fund.

- It could also utilize the training facilities in technical skills organized by different agencies such as the GTZ Ceramics Project, the SATA-supported IHDP-scheme in the small scale and cottage industry

sector and the training programmes of the Department of Cottage and Village Industries[1] to train both entrepreneurs and their employees.

- The services of institutions such as the Centre for Women and Development can be used for female-specific programmes, e.g. motivation.

- Those women entrepreneurs who have the resources to organize export-oriented industries could be assisted by the Trade Promotion Centre.

- Market surveys would need to be conducted, e.g. by the Industrial Services Centre (ISC), before selection of areas of activity; the potential areas identified so far include: (i) food industries - biscuits, confectionery, noodles, squash, dried fruits; (ii) textiles, woollen knitwear, garments, carpets; (iii) Pre-school furniture and educational aids; (iv) paper products; (v) ceramics; (vi) manufacture from waste products; and (vii) smokeless chula (stove) with a wider range.

- Specifically, attention might be given to the possible development of products - clothing, handbags, headbands (for basketbearing), table mats, carpets, etc. - using the high altitude allo fibre (Himalayan nettle). Certain research on this subject has been carried out within the IHPD project in the Dolakha District.[2]

PROJECT NO.2: **Entrepreneurship development programme for women in the Kathmandu area.**

Target population: Prospective female entrepreneurs in the Kathmandu area.

Background

Recent studies in Nepal show only a low level of participation by women in the non-agricultural sector. Some reasons for this are:

(a) unequal educational attainment among women and hence fewer opportunities;

(b) biased and unfavourable attitude of employers towards women because of the belief that women's income is only a supplement to the family income and therefore women are less mobile, motivated and committed;

(c) historical division of labour which defines women's role primarily as that of wife and mother.

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[1] The DCVI has entrepreneurships programmes in some 20 towns throughout the country.

[2] See e.g. IHDP, Small scale and cottage industry sector. Allo (Himalayan nettle). Technical report prepared by Ch. Häberli, Charikot, June 1984.

In spite of this, there is no doubt that there are thousands of women with entrepreneurial talent who are not engaged in any kind of production activities but greatly desire to get a chance to do so. It is in this context that it becomes important to promote the development of women entrepreneurs in Nepal for the purpose of self employment and new business creation, thus leading to the improvement of the status of women in Nepal and their contribution to the national economy in their own right.

Objective:

To establish a private sector supported entrepreneurship development programme for women in the Kathmandu area with e.g. following specific tasks:

(a) to co-ordinate a training course on entrepreneurship development for a group of women;

(b) to assist the women graduates in doing a feasibility study on potential areas for new businesses and to prepare their own plans;

(c) to assist participants, in co-ordination with the Federation of Nepal Chambers of Commerce and Industry (FNCCI), by providing guidence and support for their establishing of a business venture.

(d) to assist women in gaining access to credit;

(e) to help them establish linkages with other businesses and agencies so as to facilitate and promote marketing of their product/services;

(f) to record and report their performance emphasizing the factors that helped or hindered women in establishing themselves as entrepreneurs. The report would be used as feedback for the further development of the women entrepreneurship training programme.

The main implementing agency would be the Centre for Women and Development (CWD), in co-operation with the Small Business Promotion Project, the Federation of Nepal Chambers of Commerce and Industry and a training agency, Adhikary Jha and Associates (AJA).

Annex 4

Proposed framework for industry subsector assessments

In order to establish a comprehensive and orderly long-term industrial growth and competitiveness of Nepal's industry, including the meeting of skill requirements and the fulfilment of potentials for the country's work force - men and women -, consideration may be given to the undertaking of further detailed industry subsector assessments in the case of selected key subsectors. On the basis of such assessments it would be possible to design subsector-specific policies and support programmes, including such policies and programmes which would address themselves to the questions of enhanced contribution of women in the respective subsectors' development.

It is suggested that the subsector assessments be carried out as joint efforts between the government and the private sector. Basically each subsector assessment would review the present status of the subsector and seek to determine the requirements to guide the subsector towards a desired competitive position 10 years from now with respect to the domestic production/market, the production/markets of neighbouring SAARC-countries and China, and the overseas markets.

For each subsector assessment a framework along following lines may be used:

I. Specification of the industry subsector

A. Specify the subsector and participating industries
B. Upstream linkages (raw materials)
C. Downstream linkages (further processing/finishing)

II. Situation reviewing - present and projected 10 years hence

A. Market aspects (domestic and export)

1. Demand/supply situation
2. Market size/characteristics
3. Pricing
4. Distribution costs, including storage, handling, transport
5. Promotion actions
6. Trade barriers
7. Competition - India, other SAARC, China, World

B. Production/technical aspects

1. Production capacities/facilities/locations
2. Raw materials and supplies situation; imports
3. Production processes, technology, obsolescence
4. Research and development; new products; substitutes
5. Subcontracting
6. Quality control

C. Financial aspects

1. Profitability and other ratios
2. Sources of funds
3. Investments; equity ownership
4. Major cost components/cost analysis

D. Human resources

1. Employment generation
2. Training and skills requirements

E. Other aspects

1. Infrastructure requirements
2. Energy sources
3. Environmental aspects

III. Analysis

A. Analysis and identification

1. The subsector's strengths and weaknesses;

2. Programmes and potentials for human resource mobilization and skills upgrading, including the contribution of women;

3. Local material resource (including energy resource) inputs - potentials and linkage effects - and support structure (infrastructure, utilities and institutions);

4. Impact of macro - cross-sectional - policy issues (such as import liberalization, tariff rationalization, interest rates/access to credit, exchange rate fluctuations);

IV. Findings and conclusions

A. Growth targets
B. Measures to be taken
C. Monitoring mechanisms

Annex 5

List of potential joint ventures or foreign investment projects with large women employment potential[1/]

A. Agro-based industries

- Canning and dehydration of vegetables
- Cultivation and canning of mushrooms
- Cultivation and processing of fruits - dried mango, apple, jams, jellies, squash
- Cultivation and processing of herbs
- Cultivation and processing of soya
- Development of tea industry
- Production of sugar(for domestic market only)
- Cultivation and processing of dried ginger
- Integrated dairy development (domestic market only)
- Baby food (domestic market only)
- Nut production and processing - chestnuts, hazel, walnuts
- Essential oils.

B. Textile and wearing apparel industry

- Integrated textile mill (domestic market only)
- Textile processing - dyeing and finishing (domestic market only)
- Woollen blankets manufacturing (domestic market only)
- Knitwear, jersey products (domestic market only)
- Manufacture of dhoti and saree (domestic market only)
- Terry towels
- Bed linen
- Readymade garments
- Grey cloth
- Industrial gloves and aprons
- Leather shoes
- Canvas shoes
- Sericulture and silk production
- Laminated jute goods.

C. Light manufacturing industry

- Leather products
- Paper industry
- Assembly of electronic components
- Cane furniture industry
- Parquet flooring
- Stone industry - cutting and polishing
- Wall tiles
- Ceramic household goods (crafts)
- Trekking and rafting equipment
- Jewellery manufacture with precious and semi-precious stones.

1/ Partly extracted from HMG/MOI Foreign Investment Promotion Division: Nepal - Foreign investment opporunities, Kathmandu, 1987.

Annex 6

Note on the Sri Lankan Export Production Village (EPV) scheme

(a) The Sri Lanka experience

The Export Production Village (EPV) scheme was an innovation introduced in Sri Lanka 1981 to increase exports through village based production by creating link between the rural economy and export markets overseas. The programme is organized by the Export Development Board (EDB) of the Ministry of Trade and Shipping.

The first EPV exported traditional reed ware proudcts. By the end of 1986, 32 EPVs had been established and the current policy is to consolidate progress and to improve the efficiency of the EPVs. These villages export three types of products:

(i) argricultural proudce, e.g. vegetables, fruits, spices, flowers;

(ii) processed agricultural proudcts - coir, papain;

(iii) manufactured/assembled products - reed ware handlooms, wood craft, electronics, umbrellas.

Prior to establishing the EPVs, the EDB conducted feasibility studies to identify potential export markets. Once the market had been identified, links were established between the selected village and specific exporters in the formal sector. The village produces the goods. The exporter buys the produce/products, and where necessary provide the new materials as in the case of manufactures. As incentives the EDB pays exporters a cash grant of 2 per cent on purchases made from EPVs. Exporters are also given a five year tax holiday.

In the village, an EPV (People's) company was established and registered with a minimum of 50 shareholders. Each shareholder has at least ten Rs. 10 shares but no one individual can hold more than 10 per cent of the total share capital. The EDB pays 2 per cent of export earnings to EPVs. Profits are expected to be distributed among shareholders. The management of the EPV is by a Board of Directors on which shareholders are expected to be represented.

A Quality Control Centre to service all the EPVs was established recently. Presidential Awards for the best achievement in exports each year and annual exhibitions of products are added incentives to production.

It is useful to identify some of the strengths and weaknesses in the programme that has surfaced so far in order to explore possibilities of adaptation and improvement.

By linking the village informal sector with the formal sector, the programme has 'institutionalized' village based production and made optimal use of resources and technical inputs. The export potential of rural products has been tapped and the country's foreign exchange earnings increased. In the Sri Lankan context women have been major beneficiaries as their traditional

participation in agriculture and rural industries has been extensive. The scheme has in particular enabled women to continue their domestic and economic roles by promoting home-based production, extension of agro-based activities and the introduction of new skills without organizing labour in factories or 'sweat' industries and without disruption of family life. Economic activities and incomes have increased in low income families.

Nevertheless home-based work or unorganized labour and consequent lack of barganing power has exposed women to exploitation. They work long hours, utilize family and even child labour, and have no supportive facilities. The local exporter on the other hand has the opportunity of utilizing cheap and dispensable labour with minimal overshead costs such as investment in machinery, and other infrastructure and without providing ancillary welfare facilities to improve the situation of workers. Some of the negative features of unorganized and organized industry have been reproduced. It is possible, however, for the EDB to intervene and impose minimum wages/prices and satisfactory working conditions and thus eliminate some of these problems. There have been constraints too of instability in markets that point to the need for careful planning and ongoing monitoring.

(b) Potential for replication/adaptation in Nepal

It has been estimated that 40 per cent of these engaged in cottage industries in Nepal are women, althoughy official labour force statistics underestimate the participation of women in rural industries. It is perhaps possible to identify areas of village based production that can be expanded or organized to meet export demand. It is a primary requirement that an agency, such as the Trade Promotion Centre, first identify markets overseas and specific exporters in Kathmandu who can channel product to these markets.

There is potential already in the rural environment provided export markets can be identified: e.g.

(i) the carpet industry which has already exploited export potential - both home-based manufacture of yarn and manufacture of carpets, rugs;

(ii) woollen knitwear - if more sophisticated but village-based technology is introduced to improve the quality of the output;

(iii) sericulture - at present an ad hoc home based activity;

(iv) food processing - capitalizing on resources such as fruits, nuts, vegetables, ginger, soyabeans, and thereby linking agriculture, agro-based production and export-oriented industry within the seasonal cycle in the rural economy.

Organizational structure will need to reflect the local village environment but group organization has been a feature of recent projects, e.g. Production Credit for Rural Women (PCRW). Inputs will be a greater degree of formulization, new technologies and skill development and quality control. It is important that measures be taken at the outset to eliminate or minimize the negative features that have surfaced in Sri Lanka with respect to the position of the producers and particularly with regard to fair prices.

Annex 7

Field survey background material

Annex 7 Table 1. List of industries selected for survey by female employment and skills levels (Formal sector)

Name of the industry	Total employment	Women employment		Skill of women employees				Number of employee interviewed
		Total	Per cent	Skilled	Semi-skilled	Unskilled	Not known	
Kathmandu sector								
NEBICO (Confectionery)	249	52	20.8	7	3	41	1	5
Lakshmi Wood Craft	15	8	53.3	-	7	1	-	2
Women's Work Nepal (Handmade sweaters)	33	33	100.0	20	10	-	3	5
Ashoka Carbon and Allied Industries	23	7	30.0	1	3	3	-	5
Rajkamal Spinning Weaving Mills	441	150	34.0	4	20	125	1	5
Akaldas Rice and Flour Mills	5	-	-	-	-	-	-	-
Global Garments	119	33	27.7	-	20	3	-	5
Brick and Tile Factory	549	10	-	1	-	1	-	1
Kathmandu Loaf (Bakery)	45	5	11.0	-	-	2	3	5
Himal Cement	731	37	6.0	7	-	29	1	5
Dolpa Watch (Assembly industry)	62	32	51.6	18	11	2	1	5
Bansbari Leather and Shoe Factory	520	81	15.6	19	17	40	5	5
Nepal Thai Foods Pvt. Ltd. (Noodles)	100	36	26.0	-	32	-	4	5
Dolpa Carpet Industries	373	270	72.3	220	50	-	-	5
Prakash Foam Industries	20	10	50.0	-	-	10	-	5
Sound Equipment and Electrical Appliance (Radio Transister Assemble)	65	25	38.5	5	16	-	4	5
Balaju Kapada Udyog (Cotton textiles)	275	73	26.5	-	69	4	-	5
Royal Drugs Ltd.	500	277	55.4	-	277	-	-	5
Nepal Traditional Crafts	33	8	24.2	-	6	-	2	5
Dairy Development Corporation	474	14	3.0	-	2	-	12	5
Biratnagar sector								
Shiv Biri Factory	75	-	-	-	-	-	-	-
Universal Leather	56	4	7.0	-	4	-	-	-
Raghupati Jute Mills	2,209	141	15.0	2	139	-	-	5
Biratnagar Jute Mills	3,178	111	3.5	-	98	4	9	5

Annex 7 Table 1. (cont'd)

Name of the industry	Total employment	Women employment		Skill of women employees				Number of employee interviewed
		Total	Per cent	Skilled	Semi-skilled	Unskilled	Not known	
Gopal Plastic Industries	16	-	-	-	-	-	-	-
Morang Sugar Mills	512	-	-	-	-	-	-	-
Hulas Metal Crafts	144	5	3.0	-	5	-	-	3
Judha Match Factory	233	25	10.7	-	25	-	-	2
Pashupati Soap Industry	213	-	-	-	-	-	-	-
Shree Chandra Rice/Oil Mill	33	-	-	-	-	-	-	-
Ashoka Textile	187	-	-	-	-	-	-	-
Himalaya Tea Estate	385	231	60.0	-	231	-	-	-5
Rijal Tashi (Fruit canning)	14	35	45.0	-	35	-	-	-
Pokhara sector								
Nepal Rosine and Turpentine Industry	213	4	1.8	2	-	2	-	2
Gyan Industries (Saal seed oil extraction)	214	26	12.0	-	26	-	-	3
Western Nepal Katha Mill	120	-	-	-	-	-	-	-
Ghee Exporting Agencies	15	-	-	-	-	-	-	-
Butwal Dairy	14	-	-	-	-	-	-	-
Gorkha Biscuits (Confectionery)	222	46	20.7	46	-	-	-	5
Gandaki Noodles	79	20	25.3	3	-	17	-	5
Gosali Kapada Udyog (Textile)	101	90	89.0	90	-	-	-	5
Jayamata Confectionery	33	26	75.7	-	25	1	-	5
Lakshmi Loaf (Bakery)	14	1	7.0	-	-	1	-	-
Pashupati Metal Works	11	-	-	-	-	-	-	-
Bindabasini Rice and Flour Mill	6	-	-	-	-	-	-	-
Pokhara Distillery	5	-	-	-	-	-	-	-
Pokhara Woollen Handloom	10	6	60.0	1	5	-	-	-
Modern Furniture	13	-	-	-	-	-	-	-
Bindabasini Readymade Garments	12	7	-	1	6	-	-	-
Total (all sectors)	13,015	1,930	14.0	446	1,142	293	49	136

Annex 7 Table 2. List of industries selected for survey by job level (Formal sector)

Name of the industry	Top management	Middle management	Technical officers	Non-technical officers	Production workers	Non-production workers	Total
Global Garments	-	-	-	-	30	3	33
Dolpa Carpet Industries	-	-		-	270	-	270
Nepal Thai Foods (Noodles)	-	-	-	-	32	4	36
Rajkamal Spinning Weaving Mills	-	-	-	-	149	-	150
Himal Cement	-	1	-	-	7	29	37
Dolpa Watch (Assembly industry)	-	-	1	-	31	-	32
Balaju Kapada Udyog (Cotton textiles)	-	-	-	-	70	3	73
Radio Transister Assemble	-	-	-	-	21	4	25
Prakash Foam Industries	-	-	-	-	10	-	10
Brick and Tile Factory (Harisiddhi)	-	-	-	-	1	-	1
Dairy Development Corporation (Kathmandu)	-	1	2	2	2	7	14
Nepal Traditional Crafts	-	2	-	-	6	-	8
Royal Drugs Ltd.	-	1	8	5	242	21	277
NEBICO Pvt. Ltd. (Confectionery)	-	-	-	1	46	5	52
Lakshmi Wood Craft	2	-	-	-	6	-	8
Bansbari Leather and Shoe Factory	-	-	2	-	76	3	81
Women's Work Nepal (Handloom)	1	1	1	-	29	7	33
Ashoka Carbon and Allied Industries	-	-	-	-	7	-	7
Kathmandu Loaf (Bakery)	-	-	-	-	2	3	5
Raghupati Jute Mills	-	2	-	-	139	-	141
Hulas Metal Crafts	-	-	-	5	-	-	5
Judha Match Factory	-	-	-	-	2	-	25
Himalaya Tea Estate	-	-	-	-	231	-	231
Universal Leather	-	-	-	-	4	-	4
Biratnagar Jute Mills	-	-	-	-	102	9	111
Rijal Tashi (Fruit canning)	-	-	-	-	35	-	35
Nepal Rosine and Turpentine Industry	-	-	-	-	-	4	4
Saai Seed Oil Extraction	-	-	-	-	26	-	26
Bindeswari Readymade Garment (Pokhara)	1	-	-	-	6	-	7
Pokhara Woollen Handloom	1	-	-	-	5	-	6
Lakshmi Loaf (Bakery)	1	-	-	-	-	-	1
Jayamata Confectionery	1	-	-	-	24	1	26
Gosali Kapada Udyog (Textile)	-	-	-	-	90	-	90
Gandaki Noodles		-	-	-	14	6	20
Gorkha Biscuits (Confectionery)	-	-	-	-	45	1	46
Total	7	8	14	14	1,783	104	1,939

List of industries selected for survey

(Informal sector)

A. Kathmandu sector

Forest-based (bamboo, cane and straw) (4)

Basket (doko)
Basket (doko)
Wood carving
Mattress

Agro-based industries (edibles) (11)

Pulse grinding
Pickle making
Dolmoth (fried lentils)
Pustakari (sweet balls)
Batare
Lapsi mada (plum preparations)
Curd (yugurt)
Mustard oil grinding
Vine making
Sweets
Mattress (made of straw)

Mineral-based industries (copper, brass and silver) (4)

Idol making
Mane making
Utensil/small box
Silver ornament

Weaving-related activities (4)

Nepali dhaka (cap, shawl)
Cotton cloth and vella
Cotton saree
Woollen carpet

Knitting-related activities (2)

Woollen sweater
Woollen cap

Stitching-related activities (tailoring) (3)

Garment
Domestic goods (teapot holder, cushion etc.)
Cap

Other activities

Mark making
Puppet making
Wool carding
Beads appa stuffs
Mierome goods
Thread dying
Envelope making (stationery)
Pottery
Incense making
Brick-powder crushing
Women's chultho (cotton hair ribbon)

B. Biratnagar sector

Forest-based (2)

Bamboo and cane products: Main activity
Bamboo and cane products: Main activity

Agro-based (5)

Biri making: Main activity
Sanitory towel: Main activity
Beaten rice: Secondary activity
Murai: Secondary activity
Jute products: Secondary activity

Mineral-based (5)

Iron works (modern): Main activity
Iron works (blacksmithing): Main activity
Pottery (modern): Main activity
Pottery (traditional): Secondary activity
Stone cutting: Main activity
Grill: Main activity

Weaving/knitting (1)

Carpet: Main activity

Stitching/tailoring

Cap making: Main activity
Shoe making (cobbler): Main activity
Garment: Main activity

Others (1)

Candles: Main activity

C. Pokhara sector

Forest-based industries (bamboo, cane)

Basket (doko) making: Main activity
Basket (Manglo) making: Main activity

Agro-based industries

Bakery: Main activity
Confectionery: Main activity
Noodles, 2: Secondary activity
Wine making, 2: Secondary activity

Mineral-based

Zinc utensils, 2: Main activity
Grill, 2: Main activity

Weaving-related

Woollen carpet, 2: Main/Secondary activity
Weaving cotton cloth, 2: Main activity

Knitting-related

Hosiery, 2: Main activity

Others

Shoe making (cobbler), 2: Main activity

Field Survey Questionnaires

Manufacturing industries: Formal sector

(Interview checklist for owner/manager)

A. BACKGROUND

Place Biratnagar/Kathmandu/Pokhara/Butwal/Bhairahwa/Dhangadhi/ Nepalgunj/Jhapa

Location:

Industry profile:

Name of establishment:

Year of establishment:

Type of ownership:

Number of shifts/day:

Annual operation/Number of days/year:

Employment pattern:

Level of employment	Total		Women		
	Male	Female	Skilled	Semi-skilled	Un-skilled
(i) Top management					
(ii) Middle management					
(iii) Technical officers					
(iv) Non-technical officers					
(v) Production workers					
(vi) Non-production workers					

Note: (i) Managing Director, General Manager, Executive Director, Deputy-General Manager, Executive Director, Deputy-General, Heads of Departments.

(ii) Divisional Heads, Section Heads and Branch Heads.

(iii) Officers (as considered by the industry). Please mention the percentage of graduate officers too.

Main products;

Main raw materials used:

Main markets (mention year share in the market):
Local:
National:
International (country):

Other features pertaining to aims and objectives of the study:

B. IN-DEPTH INTERVIEW

1. Capacity utilization

1.1 How many other firms like yours exist in Nepal? Do you feel that the number of firms in this industry will be doubled in next:

With 2 years With 5 years With 10 years

1.2 How is your industry operating? If not in full capacity, how often does it go into full capacity in a year?

1.3 If you have constant underutilization of your capacity, what policy changes to you think are desirable on HMG's part to enhance your capacity utilization?

Brief explanation

Excise:
Sales tax:
Customs:
Income tax:
Labour laws:
Depreciation:
Foreign exchange:
Others (specify):

1.4 If you are often in full capacity, what policy changes would you consider as necessary on HMG's part to expand your:

Brief explanation

Output:
Product range:
Product quality:

Note: Collect all available secondary information (particularly in respect of output and market share).

1.5 Are these problems unique to your firm (industry) or are they being faced by other firms in your industry as well?

2. Women employment

2.1 What is your feeling regarding the number of women employed in your industry:

Low High Don't know

2.2 What do you think are the main reasons for low/high women employment in your industry? Please mention the three most important reasons:

(i)
(ii)
(iii)

2.3 Do you think you can double total employment in your industry in next:

	Total	Women	Total	Women
2 years				
5 years				
10 years				

2.4 How many women can you hire in future? For what production and involving what skills?

	Product	Skills	Full-time/part-time/Casual (please mention)
2 years			
5 years			
10 years			

2.5 Do you feel that women employment might fall in future? If yes, in which product/skills and why?

	Product	Skill	Reasons
2 years			
5 years			
10 years			

2.6 Would you be willing to hire women in new skills? If yes, which skills? If no, why not?

2.7 Can men not do better a job than women? If no, what are the advantages of hiring women?

2.8 It is often believed that men have biased attitudes towards women employment on the grounds of (particularly ask Women Managers):

Indicipline
Bad team spirit
High absenteeism
Low career ambitiin
Others (mention)

2.9 Do you feel any of the above are tru in respect of the women employed in your industry? What constraints are you facing in hiring more women?

3. Immigrant labour

Do you have non-Nepali (foreign) labour? If yes, what is the percentage/ proportion of total labour? In which skills are they hired? Are their skills not available in Nepal? If yes, why have not you recruited Nepalese labour? (If no, can they not be trained within the industry?) If yes, why are you not training them? (If no, why not?)

4. Training

4.1 Would you like to train your own staff (in-service training)?

4.2 If you were provided with an income tax rebate for the training of your women staff, would you employ more women and in doing so train them? If yes, which skills would you promote for women? What other incentives would you desire for this purpose?

5. Modernization

5.1 Are you preparing to modernize your industry?

Yes No

If yes, what are the area of modernization:

In the area of product improvement and for what product(s):
Addition of new product and which product:
Introduction of new machinery:

5.2 What do you think would be the impact of each of the above on women employment?

	Brief explanation
Better product (product improvement):	
Additional product:	
New machinery:	

6. Linkage effects

6.1 Could you please describe the linkages of your industry with other industries in formal sector and informal sector in terms of input, output and labour supply? Do you practice subcontracting?

	Brief explanation	
	Formal	Informal
Input:		
Output:		
Labour supply:		
Subcontracting:		
Others:		

6.2 What are the factory wastes? What do you do with these wastes? If they are used, who are using them and for what products or purpose?

6.3 Would you brief mention the factory (or product) you are competing with? How do you think imports of foreign goods have affected your industry?

7. Environmental impact

What measures have you taken to prevent negative environmental effect? Can these environmental effects be prevented? If so what could be done by the factory/vilalge panchayat/government? (Note: The interviewer must himself/herself make observations for environmental effects).

Brief explanation on each

Soil erosion: Deforestration: Land slides
Smoke/dust pollution
Disposal of affluent
Scenic effects (natural beauty spoilage)

8. Others

Any other comments.

Manufacturing industries: Formal sector

(Interview checklist for women employees)

A. BACKGROUND

Place Biratnagar/Kathmandu/Pokhara/Butwal/Bhairahwa/Dhangadhi/ Nepalganj/Jhapa

Location:

Name of establishment:

Level of employment (post):

Marital status (unmarried, married, divorced, widowed, separated):

Age of the employee (years):

Education qualification:

B. IN-DEPTH INTERVIEW

1. Job statisfaction/promotion

1.1 Why did you choose to work (specifically in this establishment)?

1.2 Are you statisfied with the job you are doing?

1.3 How long have you been in the job? Years.

1.4 Have you mastered your job? If yes:

How long did it take you to master it?

Did you master your job with training or without training?

1.5 Were you promoted to this job? If yes, after how long?

1.6 What is the highest position you think you can obtain? Where do you see yourself within the company 5 years from now?

2. Skill and training

2.1 Do you think you are qualified for a promotion to another skill? If yes, what is that skill?

2.2 If you had a choice would you prefer to do any other work than the one you are doing now? What are the chances that you could find a job with another comapny and in the process imprve your career prospects?

2.3 What are the skills you think you can competently work in?

Name the skills/occupation

Those which men are doing:
Those which women are doing:
Those with additional training:
Those without additional training:

2.4 What training have you obtained so far?

	Where?	What?
In the company		
Outside the company		

3. Self-employment

3.1 Have you ever considered self-employment?

Yes No

If yes, why did you not do it?

If no, why not?

4. Wage/salary differentials

Do you think there is discrimination in wage/salary payment (between women, between men and women). If yes, what wage/salary differentials exists?

5. Job-related problems

5.1 What are the three major facilities that you fell the industry (comapny) should provide to make you a better employee?

1.
2.
3.

5.2 Please mention three features that you feel are good in your job.

1.
2.
3.

5.3 Also mention three worst features of your job?

1.
2.
3.

Manufacturing industries: Informal sector

A. BACKGROUND

Town: Biratnagar/Pokhara/Kathmandu

Location:

Type of ownership:
Sole owner/partnership:

Personal information of the owner

Age: Sex: Education:

Marital status (Unmarried, married, widowed, separated)

Who is the head of the household:

B. IN-DEPTH INTERVIEW

1. Reason for taking up activity

1.1 How did you get involved in your present activity?

Inherited it:
Others (specify):
Economic reasons:
Social reasons:

1.2 What were you doing before starting or joining present activity?

1.3 Why have you not registered your activity?

1.4 Have you ever considered about wage employment? Give reasons(s) (whether, yes or no):

2. Others doing this activity

Do you feel that other people are also doing the same industrial activity you are doing?

Yes No

2.1 If yes:
(a) Give details

	How many	Where
Men		
Women		

(b) What advantages/disadvantages do you have over men, if men are also doing the same activity?

2.2 If no, do you think they can do this job you are doing with training?

Yes No

If yes, what type of training/how long/other support needs?

3. Skill possession

3.1 What specific skills do you now possess and where did you learn them?

	Skills	Place
1.		
2.		
3.		

3.2 Have you had any vocational training? If yes, specify:

4. Sources of finance

What are the sources of finance of your activity (its linkages with informal sectors)?

Own:
Money lenders (interest trade):
Others (specify):

5. Output sale (and/or purchase)

5.1 Where do you sell your product?

Wholesale (whom and where):

Retail (whom and where):

If both, mention their percentage share:

5.2 Do you have facility of government purchasing? If government were willing to purcahse your commodity would you sell to it? If no, why not?

5.3 How do you feel government subcontract purchasing could help your business?

5.4 Do you sell your product to another factory as its raw material (inputs)?

5.5 Do you need assistance in the field of management?

Yes No

If yes in what area(s)?

1. Account/book keeping
2. Selling
3. Purchasing
4. Filling
5. Employee administration
6. Machinery repair and maintenance
7. Product design
8. Product diversification
9. Wastage control
10. Store keeping

5.6 What actions do you think are not necessary for the government to undertake which government is now doing?

6. Problems being encountered

6.1 Please mention the problem you are facing

	Brief explanation
Market related:	
Credit related:	
Government rules/regulations:	
Technology related:	
Employment related:	
Competition related:	
Price related:	
Others (specify):	

6.2 How many of the above problems can you solve by yourself and in how many years?

Problems	Problem solved in 1 year, 2 years, above 2 years
1.	
2.	
3.	
4.	
5.	

6.3 If these problems were solved, how big would your activity be in terms of:

	Brief explanation
Employment (men/women):	
Revenue/output:	
Product range:	
Market share (of your product and the market area):	

7. Activity expansion

7.1 Do you want to expand your activity?

Yes No

If no, why not?

7.2 If yes,

(a) What are the most important measures you would take?

(b) Name three of the most important activities you would concentrate on:

1.
2.
3.

(c) Do you feel you would need help from the government/panchayat to undertake this in respect of:

	Brief explanation
Credit:	
Output, purchasing:	
Training:	
Protection:	
Consultancy (Technical/non-technical):	
Others (specify):	

8. Status of activity

8.1 Is this activity main/or secondary?

	Full time	Part time	Seasonal
Main			
Secondary			
1.			
2.			
3.			

8.3 How do you think this industrial activity of yours is contributing to the household in terms of:

Family (member) support/employment:
Household income:

9. Output/employment and revenue details

9.1 Please give the following information:

Product	Unit of production[a/]	Raw materials	
		Name	Source[b/]
1.			
2.			
3.			
4.			
5.			

a/ Mention daily/monthly/annual (whatever is applicable)
b/ Mention local/non-local/imported (from where).

9.2 Please give the following details:

Product	Per unit cost	Per unit selling price	Net profit
1.			
2.			
3.			
4.			
5.			

9.3 What product and what percentage of total product is marketed, (please provide information)?

9.4 How many men and women are involved in this activity, excluding yourself?

	Male	Female
Family members		
Wage labours		

10. Raw materials

10.1 Do you get raw materials in time?

Yes No

If no, then if this probelm is solved how big will be the output (production) of your industry be (double, treble, etc.)?

10.2 Given an alternative (choice), would you undertake some other activities instead of this?

Yes No

If yes, then what other activities would you take?

10.3 How is the demand of your product?

Low High Don't know

If low, then what measures would help increase the demand for your product?

Addendum

NATIONAL WORKSHOP ON THE ROLE OF WOMEN IN THE INDUSTRIAL DEVELOPMENT OF NEPAL, KATHMANDU, 4-5 JULY 1988

The findings and recommendations of the research on the role of women in Nepal's industrial development as put forward in the present study were reviewed and discussed at a National Workshop on the Role of Women in the Industrial Development of Nepal held on 4-5 July 1988 in Kathmandu.

The Workshop was inaugurated by the Honourable B.R. Ghartimagar, Minister for Industry. Participating in the Workshop were senior officials and policy-makers of the National Planning Commission, and concerned Ministries and governmental statuary bodies; representatives of industry through the Federation of Nepalese Chambers of Commerce and Industry and of women's organizations; and UNIDO technical expertise. The programme of the Workshop and the list of participants are given in Annex I and II respectively to this Addendum.

In all, about 40 persons took part in the Workshop. The inaugural session was attended by some 150 persons. The deliberations in the Workshop focussed on the various proposals and recommendations of the study report. These took place in plenary discussions covering specific areas.

At a concluding plenary session the findings and proposals of the group discussions were presented and priority areas for action were indicated as follows:

PRIORITY AREAS FOR ACTION

A first set of action proposals address policy measures necessary to increase female employment in the formal sector with emphasis on education and training needs.

A second set of action proposals address measures to increase, promote and facilitate women's participation in small-scale and cottage industries as well as female entrepreneurship.

A third set of action proposals relates to the international level and follow-up by UNIDO.

A. FEMALE PARTICIPATION IN FORMAL SECTOR EMPLOYMENT

The following set of policy considerations and specific actions are recommended:

1. New employment opportunities for women on a large scale are not possible unless major economic development takes place.

2. The Ministry of Industry is taking steps to carry out industry subsector studies. In this context a systematic assessment should be made of inter-sectoral and inter/intra-industry linkages and special attention must be paid to manpower needs and the role of women. Should an export processing zone be established minimum wages and working conditions for women should be laid out.

3. Public sector enterprises should set an example by giving special attention to the recruitment of women; by stimulating upward mobility of female employees, e.g. through equal access of women employees to in-house training; and by providing special facilities/employment conditions for women.

4. The setting up of day-care centres should be included in the industrial districts where industries with a high percentage of female workers are located.

5. In Government contracting and procurement favourable consideration should be given to firms practising an equal opportunity policy.

6. "Equal pay for equal work" legislation should be enforced.

7. Specific measures should be taken to improve female contribution/role in industry-supporting institutions, which should include:

   - Implementation of measures for equal opportunity employment in the Seventh Plan 1985-1990: thus a strengthening of female presence in key ministries/departments should be accelerated;

   - The National Productivity Council, proposed to be set up during the Seventh Plan period, should pay special attention to productivity and technology improvements in "women-intensive" industries, and, possibly, to the establishment of a special cell for women in industry.

8. A major cause for the low skills and wage level and small number of women in formal sector manufacturing are socio-cultural constraints, low literacy rate and lack of proper training opportunities.

9. The training programmes frequently do not meet today's industrial skill requirements and people trained often remain unemployed. Training programmes should be revised in order to meet envisaged skill demands and requirements for self-employment.

10. Equal access should be provided to on-the-job training and specific in-plant training courses should be designed for women in industry.

11. A women polytechnic institute as and when established should cover both research and training activities. Special training courses for women should be set up at technical schools in the districts with industry concentrations, focusing on local technical skills requirements.

12. The Women's Training Centre (WTC) should diversify its training activities with emphasis on production/manufacturing. Training needs should be assessed and programmes redesigned accordingly. The WTC human resources require strengthening and its facilities need to be upgraded.

B. SMALL-SCALE AND COTTAGE INDUSTRIES AND WOMEN ENTREPRENEURSHIP

The following set of proposals for action are recommended:

1. Subcontracting of production, requiring small capital inputs, to cottage and small-scale industries should be encouraged. In case an export processing zone is established, self-employment of women as cottage manufacturing subcontractors could be encouraged.

2. Industrial subsector and area specific reearch should be undertaken relating to potentials for women in cottage industries.

3. Effectiveness of existing credit policies and procedures regarding women's access to credit should be studied.

4. Government purchasing contracts and private sector industry contracts should be recognized as collateral for loans to cottage industries. In particular, concessional rates of interest and flexible collateral should be granted to women producers.

5. Trainers and extension workers in rural areas should be trained in assisting women to get access to credit. A similar approach as that being used in the Production Credit to Rural Women (PCRW) should be applied.

6. When women co-operatives or other manufacturing-related group activities are set up, Nepalese experience and traditions with various types of economic group activities (e.g. rotating credit) should be evaluated.

7. Quality control should be improved in order to upgrade and maintain levels of quality of products for exports.

8. Industrial areas or districts should have specific support facilities (day-care centres, health care, family planning and the like) and special sheds should be reserved for women.

9. The Ministry of Industry will give due attention and emphasis for the development of women entrepreneurship.

10. A support system for women entrepreneurs should be set up on comercial level within the Federation of the Nepalese Chambers of Commerce and Industry (FNCCI) as a "Central Entrepreneurship Development Unit".

11. Entrepreneurship education and training should be conducted both in urban and rural areas to motivate and develop entrepreneurs with special attention given to women's involvement. Action-oriented research on the presence of entrepreneurial qualities and traits among Nepalese women should be undertaken.

12. Impact of existing policies on entrepreneurship should be reviewed and revised if discriminating against women.

13. The concept of "Export Production Villages" should be studied in a Nepalese context.

14. The role and activities of NGOs and women organizations in promoting and assisting self-employment in small-scale and cottage industries as well as entrepreneurship development and other complementary functions to the government institutional infrastructure must be recognized and adequately supported.

C. INTERNATIONAL CO-OPERATION

International development co-operation agencies - bilateral and multilateral - should strengthen their programmes, inter alia, through:

1. Assessment of the role of women in existing programmes and projects in the industrial sector and strengthening their role therein. Close co-ordination among international agencies should be encouraged.

2. Close monitoring of technological changes at the international level affecting branches with a predominantly female labour force (e.g. textiles/clothing) so as to ensure an early awareness of emerging threats and potentials.

3. Stimulation of a more intensive exchange of experience among women in the industrial sector at the regional and subregional levels within the framework of existing regional and subregional organizations.

D. SPECIFIC FOLLOW-UP ACTIVITIES IN CO-OPERATION WITH UNIDO

Further action was envisaged in co-operation with UNIDO as follows:

1. In consideration of the potential role and participation of women in the specific industry subsectors, studies would be carried out for identification, viability assessment, formulation and implementation of selected schemes of informal linkages with formal manufacturing.

2. Assessment of viability and infrastructural funding requirements of the "Export Production Village" concept.

3. Infrastructure development support, as to design and organization of the training programmes for trainers in entrepreneurship and Nepalese women entrepreneurs.

4. Assistance to a suitable NGO women organization in providing support services regarding design and development of products, quality control, and marketing.

5. Organization of a workshop on women in small- and medium-scale industries and production co-operatives with the participation of SAARCC countries.

6. Assessment of prospects for production of high quality leather goods by women.

7. Assistance to the Women Skill Development Centre of the Nepal Women's Organization to develop and promote allo (nettle fibre) textile products.

ANNEX I

Programme for
National Workshop on
the Role of Women in the Industrial Development of Nepal
4 and 5 July 1988

ORGANIZED BY THE MINISTRY OF INDUSTRY, HMG/NEPAL, IN CO-OPERATION WITH THE UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION (UNIDO)

Venue: Hotel Blue Star
Kathmandu, Nepal

MONDAY 4 JULY 1988

10:30-11:30 Opening Ceremony

1. Garlanding the portraits of Their Majesties The King and The Queen.
2. Welcome speech - Mr. I.S. Thapa, Project Director, Ministry of Industry
3. Briefing presentation of UNIDO's programme on women in industrial development - Ms. B. Chambalu, Co-ordinatory, Integration of Women in Industrial Development, UNIDO.
4. Highlights of the study project - Mr. N. Ramm-Ericson, Senior Industrial Development Officer, UNIDO.
5. A few words - Mr. M.E. Smith, Resident Representative a.i., UNDP, Kathmandu.
6. Remarks - Mr. R.R. Upadhyay, Secretary, Ministry of Industry.
7. Inauguaration of the Workshop and inaugural address - Honourable B R. Ghartimagar, Minister for Industry.
8. Closing speech of the Chairman - Mr. M.L. Pradhan, President, FNCCI.
9. Vote of thanks

11:45-12:45 Session I Plenary

Chairman - Mr. R.R. Upadhyay, Secretary, Ministry of Industry

Rapporteurs - Mr. S.P. Shrestha, Production Manager, MOI
- Mr. O.P. Subedi, Branch Chief, Economic Services Centre Ltd.

11:45-12:15 Presentation of results and findings of research carried out by the team of national consultants

- Mr. Madhukar S. Rana, Leader for UNIDO Study Team of National Consultants.

12:15-12:30 Presentation of the UNIDO Study Report, its main findings and proposals

- Mr. N. Ramm-Ericson, Senior Industrial Development Officer, UNIDO

12:30-12:45 Questions from Plenary and closing remarks by the Chairman.

13:30-15:30 Session II. Group A

Chairman - Mr. I.L. Shrestha, Secretary, Ministry of Tourism

Rapporteurs - Ms. C. Fischer, UNIDO/ESCAP Associate Expert
- Mr. K. Koirala, Mechanical Engineer, Nepal Bureau of Standards and Metrology.

Presentations:
Possibilities for projects with large women employment potential in formal sector manufacturing for overseas market (Annex 3.1 of UNIDO Study Report)

- Mr. N. Ramm-Ericson, Senior Industrial Development Officer, UNIDO.

- Mr. A.J. Shah, Member of UNIDO Study Team of National consultants).

Comments by Panel Members:
- Mr. K.P. Acharya, Joint Secretary, Ministry of Industry.
- Mr. H.P. Pokharel, Director General, Department of Labour.
- Mr. K.P. Pradhan, Executive Chairman, Hetauda Textile Industry Ltd.
- Mr. H.C. Golchha, Vice President, FNCCI.

Discussion
Remarks by the Chairman

13:30-15:30 Session II. Group B

Chairman - Mr. S.N. Srivastava, Joint Secretary, Ministry of Industry.

Rapporteurs - Ms. I. Lassen, JPO, UNIDO/UNDP
- Mrs. M.R. Kayastha, Publication Officer, Nepal Bureau of Standards and Metrology.

Presentation:
Export Production Village Concept (Annex 3.2 of UNIDO Study Report)

- Mr. W.S. Nanayakkara, Chief Technical Adviser, Foreign Division, MOI.

Comments by Panel Members:
- Mr. Ray Brown, Chief Technical Adviser, Trade Promotion Centre
- Mr. T.B. Shakya, President, Nepal Handicrafts Association
- Ms. Y. Dela Cruz, UNIDO International Consultant
- P.B. Bist, Chief Technical Adviser, CSI Project II/MOI

Discussion
Remarks by the Chairman.

13:45-17:45 Session III. Group C

Chairman - Mr. I.S. Thapa, Project Director, Ministry of Industry

Rapporteurs - Ms. C. Fischer, UNIDO/ESCAP Associate Expert
- Mr. S.P. Shrestha, Production Manager, Ministry of industry
- Mr. O.P. Subedi, Branch Chief, Economic Services Centre Ltd.

Presentations:
Industrial Subsector Policies and Support Programmes (Annex 4 of UNIDO Study Report)

- Mr. N. Ramm-Ericson, Senior Industrial Development Officer, UNIDO.
- Mr. Deepak Thapa, Member of UNIDO Study Team of National consultants.

Comments by Panel Members:
- Mr. R.B. Bhattarai, Director General, Department of Industry
- Mr. Madhukar S. Rana, Leader for UNIDO Study Team of National Consultants.
- Mr. M. Satyapal, Chief Technical Adviser, Industrial Planning Division, MOI.
- Dr. B.N. Chalise, Joint Secretary, MOI.
- Ms. Y. Dela Cruz, UNIDO International Consultant

Discussion
Remarks by the Chairman

TUESDAY 5 JULY 1988

10:00-12:00 Session IV. Group D

Chairman - Mr. I.P. Shrestha, Director-General, Department of Cottage and Village Industries

Rapporteurs - Ms. Inger Lassen, JPO, UNIDO/UNDP
- Mrs. M.R. Kayastha, Information Officer, Nepal Bureau of Standards and Metrology
- Mr. S.P. Shrestha, Production Manager, MOI

Presentations:
Cottage Industry Projects (Annex 3.3 of UNIDO Study Report)

- Mr. N. Ramm-Ericson, Senior Industrial Development Officer, UNIDO.
- Miss. N. Shrestha, UNIDO National Consultant's Associate

Comments by Panel Members:
- Dr. B.N. Chalise, Joint Secretary, Ministry of Industry
- Mr. S.B. Thapa, Executive Chairman, Cottage and Handicrafts Industry Emporium
- Mr. M.M. Amatya, Joint Secretary, National Planning Commission Secretariat

Discussion
Remarks by the Chairman

10:00-12:00 Session IV. Group E

Chairman - Mr. R.D. Sharma, Additional Secretary, Ministry of Industry

Rapporteur - Ms. C. Fischer, UNIDO/ESCAP Associate Expert
- Mr. K. Koirala, Mechanical Engineer, Nepal Bureau of Standards and Metrology
- Mr. O.P. Subedi, Branch Chief, Economic Services Centre

Presentations:
Entrepreneurship Promotion (Annex 3.4 of UNIDO Study Report)

- Mrs. G. Rana, UNIDO National Consultant
- Ms. Y. Dela Cruz, UNIDO International Consultant

Comments by Panel Members:
- Mr. K.M. Shrestha, Director, Technical and Vocational Education Directorate, Ministry of Education
- Mr. R.N. Dhungel, Executive Chairman, Economic Services Centre Ltd.
- Mr. Padam Jyoti, Member, FNCCI
- Mr. P. Viloria, Team Leader, CSI Project II/MOI.

Discussion
Remarks by the Chairman

12:30-16:15 Preparation by the Groups of summary of discussions and recommendations.

16:30-18:30 Concluding Plenary Session:

Chariman: Dr. D.M. Shrestha, Member, National Planning Commission.

Presentation of summary of discussions and recommendations.

Questions from Plenary and concluding remarks by the Chairman

19:30 Dinner hosted by Mr. I.S. Thapa, Project Director, Ministry of Industry, HMG/Nepal.

Annex II

National Workshop on the Role of Women in Industrial Development of Nepal
4-5 July 1988
Kathmandu, Nepal

List of participants

	Name	Designation	Name of institution
1.	Mrs. Pratibha Rana	President	Women Service Co-ordination Committee (WSCC)
2.	Mrs. Shakti Amatya	Vice President	Nepal Women's Organization
3.	Mrs. Tula Rana	Secretary	Nepal Women's Organization
4.	Mr. Hari Prasad Pokharel	Director General	Department of Labour
5.	Mrs. Shiva Dhungana	General Manager	Balaju Industrial Estate
6.	Dr. (Ms.) Prabha Basnet	Co-ordinator	SAARC Women Section, MOL & SW
7.	Mrs. Moti Shobha Shrestha	Under Secretary	Ministry of Industry
8.	Mr. Narayan Raj Joshi	Under Secretary	Ministry of Tourism
9.	Mr. Tej Kumar Sharma	Acting Deputy Executive Director	Economic Services Centre
10.	Mrs. Nilam Basnet	Project Director	Women Education Project, MOE & Culture
11.	Mr. Mohan Man Gurung	Executive Engineer	Department of Industry
12.	Mr. Shree Ram Dev Bahttarai	Acting Chief	Training Section, Department of Cottage and Village Industries
13.	Mrs. Chandra Thapa	Director	Women Skill Development Project, Nepal Women's Organization
14.	Mrs. Dhunu Rana	Senior Instructor	Women Training Centre
15.	Mr. Chandra P. Bhattarai	Officer	National Planning Commission Secretariat
16.	Mrs. Ananda Krishna Rajbhandari	Co-ordinator	Cottage Industries Development Board, MOI

	Name	Designation	Name of institution
17.	Mrs. Shanti Basnet	Acting Chief	Women Development Section, Ministry of Panchayat and Local Development
18.	Mr. Devi Ram Gyawali	Project officer-in-charge	Small Business Promotion Project (GTZ)
19.	Mr. Sushil Ram Mathema	Officer	Nepal Rastra Bank
20.	Mr. Binod Prasad Bhattrai	Section Chief	Agriculture Development Bank
21.	Mrs. Meena Shrestha	Research Officer	Federation of Nepalese Chambers of Commerce and Industry
22.	Mrs. Bijaya Baidhya	Chief Officer	Trade Promotion Centre
23.	Miss. Sulochana Mushyju	Section Officer	Nepal Industrial Development Corporation
24.	Mrs. Bina Pradhan	Director	Centre for Women and Development
25.	Mrs. Ambika Shrestha	President	Business and Professional Women's Club
26.	Ms. Meena Bhattarai	Executive Director	Association for Craft Producers
27.	Mrs. Yangji Sherpa	Director	Structo Nepal Pvt. Ltd.
28.	Mrs. Uttara Shrestha	Entrepreneur	Balaju Industrial Estate
29.	Mr. C.R. Dhakal	Vice-President	Nepal Readymade Garment Industry Development
30.	Mr. C.N. Lama	Executive Secretary	Nepal Carpet Industry Association
31.	Mr. R. Shakya	Treasurer	Nepal Handicrafts Association
32.	Ms. Savitri Thapa	Member/Secretary	Co-operative Board

ALTERNATE PARTICIPANTS

33.	Mrs. Chapala Kariala	Member/Secretary	Women Service Co-ordination Committee (WSCC)
34.	Mrs. Rostan Karki	President	Nepal Women's Organization, Bagmale
35.	Mrs. Remuka Manadkur	Officer	Department of Labour.

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35.	Mrs. Renuka Manadkur	Officer	Department of Labour.