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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

WOMEN, INDUSTRY AND ENTREPRENEURSHIP
Sample cases

Women in industry series no.1

Inside front cover:

**Message from the Chairperson of UNIDO's Task Force
on Preparations for the Fourth World Conference on Women**

Throughout the world, women make a vital contribution to industrial output. Over 200 million women are employed across all industry sectors, with half of this number in developing countries. Their work not only sustains their families, but also makes a major contribution to socio-economic progress. Most women are employed in low-skilled, poorly-paid positions, where they are often exposed to health hazards. On the other hand, we are seeing the advance of an increasing number of highly educated women into senior decision-making positions. The creativity and talents of all women are an invaluable resource, which can and should be developed both for their own self-realisation and for the benefit of society as a whole.

The key to enhancing women's opportunities, and hence their position in industry and the economy, is to provide them with access to know-how, technologies and credit. Training to upgrade women's technological capabilities and enhance their entrepreneurial and business skills, whether in simple artisanal production or in high-technology industries, is at the heart of allowing women to advance to more rewarding positions. All these activities are an integral part of UNIDO's technical assistance programmes. The case studies presented in this series of brochures demonstrate that women can not only succeed in sectors where they have traditionally had a strong presence, but can also reach leading positions in sectors that were previously believed to be the exclusive domain of men. They also show that technological solutions can directly benefit women by improving their living and working conditions, particularly in sectors where they tend to be concentrated.

UNIDO is committed to sustainable industrial development as a means of achieving economic prosperity, a healthy environment, and integration of all groups in society. It is our firm belief that enabling the full contribution of both men and women, in all sectors of industry, is indispensable for attaining this objective.

A. Tcheknavorian-Asenbauer

~~Women, Industry and Entrepreneurship~~

Small and medium-scale enterprises (SMEs) play a vital role in industrial development. They have the flexibility to respond quickly to market changes and opportunities, to develop specialised product niches, and to rapidly absorb technological innovations. They are responsible for substantial capital formation and job creation at the local level, and thus to improving local standards of living.

Women have traditionally played an important role in the SME sector, as owners, managers and workers. They dominate three important subsectors, making up over 80% of the employees in textile, clothing and leather production, 75% in food, beverages and tobacco production, and over 60% in wood and wood processing. They also perform most agricultural work in rural areas, where they act as micro-entrepreneurs and traders of agricultural produce.

Although it can be dynamic, the SME sector is all too often marked by outdated and inefficient practices and technologies. As a result, small enterprises tend to operate far below their productive capacity. Improving their efficiency and introducing new techniques can therefore yield large returns to women in terms of income and job creation.

However, women are often unaware of the opportunities, and they typically face several obstacles to taking action. Three in particular stand out:

- **Skills:** Women often lack the skills required for entrepreneurial ventures. Whereas many programmes operate on the grassroots level, women entrepreneurs require upgrading of their managerial, technical and marketing skills in their particular subsector if they are to be able to increase their competitiveness.
- **Technology:** Small scale businesses often use inefficient low-cost technologies which yield products of poor quality and pose hazards to health and the environment (see the UNIDO brochure *Women, Industry and Technology*).
- **Financial Support:** Women entrepreneurs often lack access to credit required to invest in new technologies.

UNIDO's programme for support to women entrepreneurs is designed not only to enable their greater participation in SMEs, but also to assist them to enter non-traditional, more productive and more profitable businesses and sectors. UNIDO's training for women entrepreneurs is very pragmatic, and seeks to provide them with all the skills they need, both managerial and technical, in a single package.

UNIDO programmes also emphasise institutional development, to create cooperatives, networks of entrepreneurs, and links to sources of finance (including new and innovative systems of credit and financing), technical advice, and marketing channels. The overall approach is based on abundant evidence that women are able to become successful entrepreneurs when they have access to the right skills, technologies and financial support.

UNIDO assists women in meeting the challenges of industrial restructuring and technological change, and in participating on an equal basis both in industrial decision-making and in the benefits of development. UNIDO promotes the advancement of women through mainstreaming, recognising women as full actors and equal partners in development activities and training programmes. There are also specific programmes and services to remove obstacles preventing the full participation of women in development. These are initiated by UNIDO's Integration of Women in Industrial Development Unit, established in 1986. UNIDO's approaches are illustrated in the following case studies.

Case 1: Revitalising Traditional Pottery in Bolivia. Traditional pottery villages in the Andes were declining. UNIDO reversed this by providing women with better tools and training in new techniques, enabling them to become successful entrepreneurs.

Case 2: Artisanal Fish Smoking in Togo. Fish smoking is performed by women, but they were using inefficient tools and techniques. UNIDO trained the women in new approaches, improving quality, productivity and income-generation.

Case 3: Creating Textile Entrepreneurs in Kenya. Many women worked in garment production, but lacked appropriate tools and business skills. UNIDO's programme provided these, and helped turn 380 craftswomen into successful businesswomen.

Case 4: Beurre de Karité in Guinea. Shea butter, a traditional foodstuff, required arduous processing. UNIDO introduced labour-saving technologies and trained women in business skills, reducing their work and giving them a new source of income.

Case 5: Training for Food Processing in Tanzania. Women produce almost all food, but were not able to take advantage of business opportunities. UNIDO's training course gave them the technical and business skills they needed to succeed.

Case 1: Revitalising Traditional Pottery in Bolivia

Background: Almost all the inhabitants of Huaycufi, a village 9000 feet high in Valle Alto in the Andes, are potters. The men throw the pots at the wheel, while the women collect clay and firewood, decorate the pots, and take them to market to sell. A UNIDO project sought to reduce the women's tedious work of collecting clay and firewood by setting up a cooperative and introducing new technology.

New gas-fired kilns were installed, and the donkey carts at the clay site were replaced by a truck. A mechanical system was introduced for crushing clay, which had previously been done by young boys with hammers or their bare feet. A further health hazard was eliminated when substitutes were found for the traditional glazes made from toxic car batteries.

Focus on Women: By reducing physical labour and introducing new technologies, the project reduced the burden on women. The project also sought to enable women to start pottery itself, but this meant changing the division of labour in the village, which proved to be impossible in the light of its deep social and cultural roots. This experience serves to emphasise that project assistance to enhance the role of women must respect local traditions in order to be successful.

The village women were, however, very interested in selling and marketing the pottery. UNIDO therefore focussed on strengthening their abilities in these areas, and also helped them to introduce new styles and decorations.

Benefits: The project has helped villagers in several different ways. The men have better tools and techniques for firing, while the women have better sales skills and new opportunities to generate income.

They are able to produce more valuable pottery, as many of the new designs, such as those drawing on Asian motifs, sell for many times the price of traditional pots. More young people have also been attracted to pottery, helping to revitalise and preserve the Quecha cultural heritage.

By applying their new skills and designs, the village women have been able to open a pottery shop in the local town of Cochabamba, and they also sell their pots at the market at La Paz. The village has even begun to contribute to international trade, as it now makes clay bottles for Singani, a pisco-style alcoholic beverage which is being exported to Austria.

Women have also benefited in their role as household managers, since the water, gas and electricity that were installed to upgrade the pottery production have also improved family living conditions.

The overall success of the project may be assessed by its impact on local demographics. The neighbouring Quecha indian villages only 5 km away are being depopulated by migration to cities, but the population in Huayculi is rising. Where there were previously 75 families and a total of 490 people, the village now has 95 families and a population of 700.

Case 2: Artisanal Fish Smoking in Togo

Background: Togo produces 15,000 tonnes of fish products annually. The fish processing, which comprises salting, drying and smoking, is performed exclusively by women, and is the source of over 2,000 to 3,000 artisanal jobs. Traditional processing and smoking techniques were inefficient, however, and there was poor quality control and packaging. As a result, over 30% of the fish was lost during processing and storage, which was a loss of valuable raw materials and a source of pollution, while the quality of the products was poor.

Furthermore, with rising fish quality standards in important export markets such as the European Union, it was becoming increasingly difficult for the Togolese manufacturers to access these markets unless they introduced quality improvements. Building the skills and capacities of the women working in fish processing therefore not only helps the women directly, but also contributes to national economic development. In 1994, UNIDO embarked on a project to tackle the most urgent issues associated with the fish processing industry in Togo. This project had three components:

- Introducing improved manufacturing practices, initially in three companies (Crustafic, Togocrus and STPM);
- Upgrading the technologies used for artisanal fish processing;

- Training the women working in fish smoking to improve their efficiency and management capabilities.

Focus on Women: UNIDO's objective is to train over 20 women trainers, who will work with the 2,000 to 3,000 women in the processing industry. The training is carried out locally, as is the development and testing of the training materials.

Alongside the training, a pilot site has been selected to test and demonstrate the new approaches to fish smoking. The fish smoking equipment (artisanal ovens) is manufactured locally, and additional training is being carried out for the women manufacturing these ovens to update the design.

Benefits: The improved management and processing techniques will allow a reduction in losses from 30% to 10% during the processing stage, while the improvements in product quality will help build export markets. They will also reduce losses of the final product, since improving the product quality increases the conservation time, resulting in less wastage between production, retail and final consumption.

For the women, better practices translate directly into increased income. They also result in time savings, since the traditional techniques required continuous observation of the fish smoking process, whereas the women can now start the process and continue with other, less tiring, productive activities. The increased production of fish also helps women as mothers, in view of its importance as a nutritious foodstuff.

Case 3: Creating Textile Entrepreneurs in Kenya

Background: Women play an important role in the garment industry of most developing countries, often working on a part-time basis at home and producing children's and ladies' dresses for friends, neighbours and other customers. In Kenya, this informal sector is known as Jua Kali - Swahili for hot sun', which refers to the open marketplace type of operation.

Focus on Women: Before UNIDO's intervention, the women were working significantly below their productive and income-generating potential, as they faced a number of barriers:

- General lack of technical and business skills, ranging from design to marketing and accounting. Access to training was also inequitable, since it was often focussed on men.
- Limited access to credit from formal financial institutions.
- Inability to afford adequate tools and machinery necessary to produce goods competitive in quality and price.

In the light of these problems, the Kenyan Ministry of Technical Training and Applied Technology requested UNIDO's help to upgrade the skills of the Jua Kali women. In 1991, UNIDO launched the first six-month training programme in Nairobi, in five sections: new product development; production techniques; business management; marketing and promotional skills; and sewing machine repair and maintenance. The programme emphasised building local capacity through training the trainers, who then replicated the project activities at another location in Kenya.

Benefits: Since 1991, the programme has so far graduated over 380 businesswomen, and 285 of these have received assistance in marketing. Over 50% of the trainees have been able to obtain credit from formal financial institutions, allowing them to invest in new cleaner and more efficient technologies, expand their businesses, and create over 850 new jobs for women. There have also been visible improvements in product quality, development of new designs, increased sales, and initial development of export markets.

UNIDO's experience in Kenya led to formation of a thematic programme entitled 'Women entrepreneurs for industrial growth', which has replicated the Kenyan experience in other subsectors and countries, and allowed more women to move from being casual craftswomen to successful entrepreneurs.

Case 4: Beurre de Karité in Guinea

Background: Beurre de karité (shea butter) is an agricultural product found in many West African countries. It is produced rurally from an almond-like nut, and used locally as a foodstuff. It is also exported outside Africa as an ingredient for pharmaceuticals and cosmetics such as hand creams.

The transport and communications infrastructure in Guinea is poorly developed, and there are very few services such as water and electricity. Any project to improve the conditions for women producers of beurre de karité must therefore take account of these economic and developmental realities.

Focus on Women: The production of beurre de karité is almost completely performed by women. They cultivate the plants, collect the nuts, transport them to their houses, and then process them. The processing is an arduous and repetitive task, involving manual crushing with a stone, and then removing the crushed shells from the butter. Village women often spend ten or more hours a day in such work, since beurre de karité is one of their basic staple foodstuffs.

UNIDO worked with the government on a pilot project in three villages to introduce hand-operated crushing and pressing machines, which can increase the productivity of the women ten-fold. The machines are manufactured in Mali, and are an appropriate technology for Guinea, since they are small-scale, and do not require water or electricity.

In selecting pilot sites, UNIDO looked for villages that already had cooperative activities among the women, for example in cooking, selling or transportation. The groups of women, typically 20-30, were provided with equipment for processing shea butter within a credit scheme to be repaid through the revenues generated from sales of beurre de karité. The project included literacy training for the women, as well as training one member of the group in accounting and administration skills, which are necessary to deal with the bank supplying the loans for the machines.

A second stage of the project is examining the potential for a more market-oriented approach, and is surveying potential customers in Guinea and in the neighbouring region for the surplus of beurre de karité that the women are able to produce using the new technology.

Benefits: The project has several benefits for the women. Most immediately, they can now produce in two hours what used to take ten, thus liberating time for cooking, child care and other productive activities. The work is also less repetitive and less arduous physically, which greatly improves their quality of life. In addition, producing beurre de karité is now no longer just a subsistence activity, but a

source of income.

The village women have also acquired new skills, including not only basic literacy, but also a basic understanding of finance and credit, accounting, and sales and marketing. In this way, the project has given them a foundation for future entrepreneurial activities.

Case 5: Training for Food Processing in Tanzania

Background: Food processing is a popular occupation for women in small-scale enterprises, since it is an extension of their work at home. In Tanzania, the subsector accounts for 25% of total formal employment in manufacturing and processing, while its links to agriculture also support local production of raw materials. Food production and processing also address the most basic needs of the population.

Focus on Women: 87% of the women in Tanzania live in rural areas, producing almost all of the food, including cash crops. Their opportunities and potential contribution to the economy have been limited, however, since they lack access to training and credit. In response to this need, UNIDO has developed a training programme in cooperation with the Tanzanian Small Industries Development Organisation, to provide businesswomen with the entrepreneurial awareness, management skills and technical knowledge required to run a viable small-scale food processing enterprise. A needs assessment revealed potential local and export markets for nine different food products, including sausages, biscuits, dried vegetables, sunflower oil, tomato paste, hot mango pickle and desiccated coconut.

A set of manuals on food processing techniques was developed, translated in Kiswahili, and adapted to local conditions. A four-week workshop was held in Morogoro in 1993 to train 17 women trainers from public and private institutions. The programme is the first in Tanzania to combine managerial and technological skills, and is designed to be very pragmatic, taking a hands-on, learning-by-doing approach to build knowledge and experience.

For the widely advertised first six-week course, 18 women entrepreneurs were selected, each of whom was running a food processing business as her primary source of income. The course has been followed up with counselling services for entrepreneurs. The network established by the project also includes links to credit institutions, and to local manufacturers and suppliers of food processing equipment.

Benefits: The first women entrepreneurs to be trained have already increased product quality, productivity and marketing effectiveness in their food processing businesses, and the project is expected to make a significant contribution to income generation and job creation among women. The course was rated very highly by participants, the business community and government officials. It received wide coverage on local radio, television and newspapers. The project was involved in the annual trade fair, and some of the women entrepreneurs were involved in the Commemoration of African Industrialisation day in Dar-es-Salaam.

The course methodology is being used as the basis of a wider programme, which is being implemented in other regions of the country, including Iringa, Arusha, Kilimanjaro and Tanga. Many suggestions have been received on how to build on the course, including extending it to all 20 regions of Tanzania and Zanzibar, introducing consultancy services on a shared cost basis, and developing a credit scheme for the trained women.