



Special issue on Rural Livelihood & Poverty Alleviation

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**New DIPP-UNIDO initiative
for Integrated Cluster
Development:** (See page 7)



Stone carving

Earlier, we used to sell our products to the local traders and our margins were very thin. After we formed our own society, we were able to establish this common sales outlet and reach out directly to the customers. Our margins have now increased to over 30%. After all, there is no middleman involved now.

Bipin Maharana, Master Craftsman, Konark



Handloom

When we first went to sell our products in the market, we had no idea where to sit and how to sell. We were the only women sellers and the menfolk laughed at us ... At first, our Tie and Dye yarn (which we make ourselves after this training programme) didn't sell well but slowly, the situation improved. Gradually, our sales picked up and our incomes increased.

Bhumiseeta, Bibhar Kusanpuri



Sal Leaf

Earlier, I was earning around Rs 600 a week. Now I make as much as Rs 900. The price has increased and now I find it easier to send my children to school. I am able to manage my household better and it is not as difficult as in the past to cope with illnesses.

Golapi Singh, Hathikot village



The programme informed us about the new machine, and motivated us to buy it with a loan from my micro-credit group. Earlier, I was stitching leaves and making around a dollar a day. Now, because of the machine it has doubled to \$ 2 daily.

Shaibati Ghadei, Swaroopvilla village

MSME Cluster Development Programme in the State of Orissa

Over the past one decade, United Nations Industrial Development Organisation (UNIDO) has worked intensively in the field of micro, small and medium enterprises (MSMEs) cluster development in India, which is increasingly recognized as an important contributor in the fight against poverty. Clusters enable poor producers to share resources, lower costs, and undertake joint activities that generate incomes and returns which would have been out of reach for individual enterprises.

UNIDO started a cluster development programme in the state of Orissa as part of the DFID (Department of International Development of the UK) funded programme "Enabling Pro-Poor Economic Growth in Orissa". Under this project called the MSME Cluster Development Programme in the state of Orissa, which commenced in April 2005 and concluded in May 2008, a two-pronged strategy was adopted: on the one hand, UNIDO provided direct assistance to four clusters in the state - one each in handloom (Barpalli), handicrafts (Stone Carving), non-timber forest products (NTPF: Sal Leaf- Baripada) and small scale light engineering industries (Rourkela); and on the other hand, the relevant agencies of the State Government of Orissa were assisted through capacity building and policy advice for the upscaling of the clusters. This helped generate commitment among policy makers to the cluster development approach having a significant impact on poverty reduction.

**UNIDO CLUSTER DEVELOPMENT PROGRAMME
in association with GOVERNMENT OF ORISSA & DFID**

Orissa Projects Benefit the Poor

STONE CARVING CLUSTER: REVIVING A TRADITIONAL INDUSTRY

Puri
Konark
Bhubaneswar



The scenario

Stone carving is one of the major crafts of Orissa and also one of its oldest. The origin of stone carving in Orissa dates back to the 13th century when the Kalinga school of architecture flourished and the world renowned Sun Temple of Konark stood as one of the finest examples of artistry carved in stone. Since then families have passed on this tradition from generation to generation. Stone carving has been characterized by the state government as “a craft with a development dimension”. Stone carving takes place within craft production units and in households. The units are established by a master craftsman, often in a rented premise where he employs a handful of artisans - both skilled and semi-skilled - to produce stone carving products. Production takes place mostly within the craft production units rather than in individual households. Owners of the units secure orders from local traders and very few have direct linkages with the national and international markets. Skilled artisans work as subcontractors for a daily wage or are paid on a piecemeal basis, while semi-skilled artisans are hired on a daily wage basis only.

Major problems

Market access

- › The cluster catered to low end markets, had no brand image



National awardee Lingaraj Maharana at his workshop

for products, nor any linkages to the higher end national markets such as Mumbai, Delhi where margins are much higher than in the local markets.

- › Product range unsuited to the needs of export market.

Access to credit

- › Most units had no access to formal credit, as the institutional financial system does not pay small amounts to the artisans.

Raw materials and technology

- › Non-availability of raw material (sand stone, soft stone) hampers the production process.
- › Limited use of machinery, especially in cutting, sizing, polishing etc, leading to higher costs compared to competitors who use mechanized methods.

Limited product development

Lack of organization

- › There is a lack of organized effort to take care of the larger interests of the artisans, who have not been able to forge business partnerships to take care of their common problems and issues. Despite sporadic efforts to organize artisans through cooperatives and self-help groups (SHGs), these have lacked the market-driven approach and not been very efficient in tackling issues on a sustained basis, coupled with lack of trust among the major players like the craft production units, marketers etc.

Poor working conditions

- › Poor housing, poor health and poor working environment with no proper lighting at the work place hinders cluster production.



Radha Ballav SHG artisans at skill enhancement training in Konark

UNIDO Intervention and its Impact

The essence of the UNIDO intervention was to leverage collective efficiency benefits by enabling the artisans to reap the benefits of economies of scale and engaging in joint actions. In a **four-pronged strategy**, artisans belonging to the same categories were organized in networks such as SHGs and cooperatives to

- 1) address the issue of access to credit; and it then promoted the development of collective activities in the following areas in the cluster:
- 2) establishment of direct market linkages at the national and international level;
- 3) productivity enhancement through upgradation of technology and better management practices; and
- 4) empowerment of women artisans.

Better access to credit for artisans

- › Rs 75 lakh worth of loans were extended to artisans at lower rates of interest than what was being charged from them earlier by informal money lenders. And 100 % of the credit is invested in productive activities namely, purchase of raw materials, tools and machines and payments to the work force.

Stronger Market Linkages

- › Artisans were made aware of market requirements, market trends and consumer preferences, region-wise. 15 buyers have been linked to the clusters and linkages have been

- › established with 10 premier national exhibitions and 3 institutions CCIC (Central Cottage Industries Corporation), Utkalika and SEWA which have sales outlets all over India.



Higher Quality, Higher Margins, Higher Incomes

- › There has been a shift in the clusters from the production of low quality, cheaper goods to higher quality, higher priced products, as a result of establishment of direct linkages with retailers and demanding buyers.

- › Margins earned by artisans and master craftsmen have increased very substantially from a meager 5 % to as high as 35 to 50%! As many as 45 units have reported average increase of 20 % in sales, which in turn has resulted in higher incomes for the 400 artisans employed in these 45 units. The income of the skilled artisan has risen from an average of Rs 3000 to Rs 5000 per month, while the corresponding increase for semi-skilled artisans is estimated to have gone up from Rs 1000 to Rs 2500 per month. All trained young people have found employment or self-employment in the cluster.

Artisan working on jalli cutting machine, Puri

Big increase in productivity

- › UNIDO intervention has increased productivity of the units by 15 to 20 % through the introduction of modern machinery (such as stone cutting machines) and best business management practices.

Empowered women artisans

- › Women artisans have gained increasing self-confidence, going to the markets to directly sell their products and have taken the lead in addressing other social issues including health and hygiene, leading to better sanitation and better environment for work.



Carving the way to prosperity

UNIDO-State Government Partnership in Action

As the UNIDO partnership with the Directorate of Handicrafts & Cottage Industries, Government of Orissa, progressed, a Cluster Cell was established as a separate wing of the Directorate to ensure a clear focus on cluster development. Slowly, the functions of the Cell were passed on to SIDAC (State Institute for Development of Arts and Crafts), which implemented the cluster development programme in 11 clusters, leading to improvement in skills and quality of products of Stone Carving, Terracotta, Coir, Golden Grass etc. Necessary institutional capacities have been created & systems put in place for sustainability of cluster development.



The scenario

The Ikat handloom cluster of Barpalli in Orissa consists of seven villages of the Barpalli block and one village of Bijepur block, both located in the district of Bargarh in Sambalpur. The cluster accounts for nearly 68 % of the total looms of the district. The growth of weaving activity dates back to the advent of the Bhulia Meher community in 1726, who were quickly followed by the Costa Mehers (tussar weavers) and Kuli Mehers (less skilled weavers). An impetus to the weaving activity came with the establishment of the Sambalpur Bastralaya in 1942, which supplied dyed yarn to the production unit at Barpally from where it used to be made available to the weavers. Meanwhile, the state government supported the creation of cooperative societies in the region and provided support in the form of subsidies, rebate, technical assistance etc. However, while a lot of capacity building was

carried out on the production side, there was hardly any capacity building of the local weavers or societies in market or market-led design and product development. Later, even the support from the apex cooperative societies started dwindling due to their internal problems and the offtake for marketing by these agencies declined to as low as just 10 % of the total output.

Major Constraints

Limited Access to and Mismanagement of Credit (only two financial institutions were linked to the cluster, and furthermore, while providing credit to groups of weavers, they were not able to infuse financial discipline into the cluster which resulted in the weavers utilizing loans for consumption rather than production); **Lack of Appropriate Technologies** e.g., all pre-loom processes were done manually and outdoors (which meant all activities coming to a halt during bad weather);



Traditional way of weaving

Problem of Access to Raw Materials (In the absence of yarn suppliers in the cluster, yarn had to be sourced from neighbouring towns - Non-availability of quality dyes was another issue); **Limited Innovation Capacity; Limited Access to markets** (e.g., Even the national awardees and master weavers, who otherwise had access to markets outside the state, could not establish lasting marketing linkages as they could not meet the volume of demand); and **Social Issues - Health, Gender** (Poor health and sanitation - Women handling a disproportionately large share of the workload but having limited decision-making role in most weaver families).

UNIDO intervention and its Impact



Auto weft winding machine with gear and brake

In Orissa, handloom is the second largest source of livelihood and employment, after agriculture. However, poverty has been widespread in the handloom clusters. Hence, the UNIDO intervention primarily aimed at reducing poverty by promoting development of handloom clusters in Barpalli and showcasing the impact of cluster development on poverty reduction for further replication of the initiative elsewhere. Barpalli was chosen because of the high concentration of looms in the area and secondly, due to the willingness of the state Textile Department to make Barpalli a model for cluster development; 8 villages were selected Barpalli, Jalpalli, Baghbadi, Bandhpali, Kusanpuri, Phulapali, Amamunda and Jhulopali.

Weavers Earn More with Better Access to Credit

› 69 JLGs and 35 SHGs were formed; 752 weaving families, as members of JLGs/SHGs, linked to formal credit sources and banks sensitized to credit needs of the cluster. By January 2008, credit worth Rs 75.94 lakh was extended to these groups, enabling weavers to produce and supply more products (mainly sarees and dress materials) and stop distress sales. Around 600 families in the cluster are earning at least Rs 500 more per month thanks to the credit inflow. Some contractual

weavers who were working for Master Weavers on low wages are now able to buy raw materials and have become entrepreneur weavers themselves !

Improved Productivity, Mechanisation of Pre-loom Processes

› All pre-loom activities have been mechanized. The motor-operated weft winding machine has enhanced the loom's



Khetra Mohan Meher, a highly skilled Master Weaver

New range of product designs given by Fab India

productivity. With the help of the warp winding machine more than 50 warps are being produced at a time which is 25 times higher than the previous output. Smaller size of the machines allows the weavers to work indoors, thus freeing them from the vagaries of weather and work to their optimum capacity.

Skills Upgraded

› UNIDO has promoted skill upgradation of semi-skilled Kuli weavers. As a result, 145 Kuli weaving families are using their own tie and dye yarn for weaving instead of buying them from the market, and are also selling these yarns directly in the market. Weavers are now producing higher end products which earns them a margin 60 % higher than low cost products.

Fostering Social Development, Empowering Women

› Weavers are now aware of the availability of health and life insurance schemes. Health conditions of the weavers have significantly improved with the construction of a number of sanitary latrines as well as sanitation camps organized to raise health awareness.

› In order to improve housing conditions of the weavers, UNIDO facilitated registration of the land where the houses were built so that the weavers could register under the special housing scheme offered by the state Textile Department, and once the land tenure (or title deed or "patta" as it is called) was secured, UNIDO facilitated enrolment of the weavers under the housing scheme. 120 weaver families thus applied for land and 20 families got improved housing.

› Women weavers, hitherto confined to their homes stepped out, and set up their own federations with the help of UNIDO, undertaking joint social and economic activities including design and product development projects and participating increasingly in decision making at household as well as community levels.



Maitree Bunakar Mahila Sangha village level federation of women weavers



Realising the dream of owning a house-cum-workshed

Introduction of cost-sharing in schemes and policies

In April 2007, Secretary, Department of Textiles, Government of Orissa, was taken on a visit to the directly-assisted cluster of Barpalli where self-help groups recalled how an exposure visit to Pochampalli in Andhra Pradesh under UNIDO intervention helped them identify an appropriate technology for their cluster. The Secretary then visited a Common Facility Centre (CFC) established by the self help group for shared use of newly acquired machinery, as well as for reproducing the machinery and selling it to other cluster stakeholders, with the construction and operation of the CFC made possible through a combination of bank loan and cost-sharing between the beneficiaries. Secretary was impressed by the results of cost-sharing, especially the high degree of ownership that the stakeholders had developed vis-à-vis the cluster initiative. Immediately thereafter, cost-sharing practices were introduced in the schemes of the Directorate with the objective of making efficient use of existing resources and stimulating a sense of ownership among the beneficiaries.

MACHINING AND FABRICATION CLUSTER

Rourkela



The scenario

The Machining and Fabrication cluster in Rourkela (Orissa) a major iron and steel industrial belt in the eastern region of India - was one of the clusters identified for direct assistance within the framework of the cluster development programme. There are approximately 140 small and micro enterprises in the cluster which operate as ancillary units of the mother plants viz., Rourkela Steel Plant; the cement factory OCL; Larsen and Toubro etc who provide them with job specifications and occasionally, raw materials, and medium and large scale units including sponge iron and casting units located within and outside the district.

Major problems

Irregular supply of raw materials and dependence on traders charging high prices; insufficient orders and lack of market intelligence; lack of technology and business management practices; and absence of skilled manpower were among the major problems facing the cluster.

UNIDO intervention and its Impact

The objective of the UNIDO project was to promote economic growth of the cluster by helping the stakeholders to collectively address bottlenecks, and take advantage of emerging opportunities.

Networking to success

- ▶ Tier I units (which take up larger volume jobs) have established a consortium - CORE (Cluster of Rourkela

- ▶ Engineering Enterprises) and 20 Tier 3 units (self-employed entrepreneurs who constitute the majority of the cluster) have established a network known as the Rourkela Techno Park Self-Help Cooperative Limited (RTPSHCL).

Accessing credit

- ▶ Credit linkages were established for the cluster units with the Small Industries Development Bank of India (SIDBI) and State Bank of India under the existing credit linked subsidy and the Credit Guarantee Trust for Small Industries schemes. One micro finance institution has been linked to the cluster.

New Technology leads to increased productivity, quality, turnover

- ▶ Introduction of new technology has generated increases in productivity and quality, resulting in more orders being placed on the cluster. The corresponding increase in turnover is estimated at 40 % for Tier I and over 60 % for Tier 3 units
- ▶ New markets were identified. 10 Tier I units got registered with the Directorate General of Foreign Trade (DGFT), for export-import. Further, 20 units have attained ISO certification.

Trained youth find jobs

- ▶ 150 trained youth have acquired technical skills and all trained youth have found jobs in production units within and outside the cluster, earning at least 30 % higher than the unskilled workers.

NON-TIMBER FOREST PRODUCTS CLUSTER

Baripada

The scenario

The UNIDO cluster development programme covers 15 of the 95 villages in the Sal Leaf Cup and Plate cluster in Baripada in the Mayurbhanj district of Orissa. Families mostly tribal living in the cluster depend directly or indirectly on Sal leaf and Sabai grass for their livelihood. Since times immemorial Sal leaf plates and cups - described here as non-timber forest products (NTFP) - have been used on festive occasions as the leaves are considered auspicious. Over four decades ago, some traders began trading hand made Sal cups (donas) - round in shape and stitched with bamboo sticks - within Mayurbhanj. In the 1970's introduction of the electric-driven pressing machines gave a boost to the production and trade of pressed cups and its popularity spread to other Indian states. The market at Betnoti, just 15 kms away from the cluster, became the hub for buyers and sellers. About 2000 Sal leaf plates and cups were even exported from Calcutta to Europe and South East Asia. The **main players** in this humming cluster are the **Primary Collectors, majority of them tribal women** living below the poverty line who collect leaves from the forest and sell the raw or semi-processed Sal leaves (known as Khalis or Dwipatris) to earn a livelihood; **Agents** (called Cycle wallas as they go around villages on bicycles to procure Dwipatris) which are then carried by agents to Betnoti ; **household processing units**; and **traders** (medium and big). Interestingly, a Participatory Poverty Assessment undertaken by UNIDO found poverty to be particularly relevant among the primary collectors, household processors and the cycle-wallas. It also identified the major problems of the cluster.

Major problems

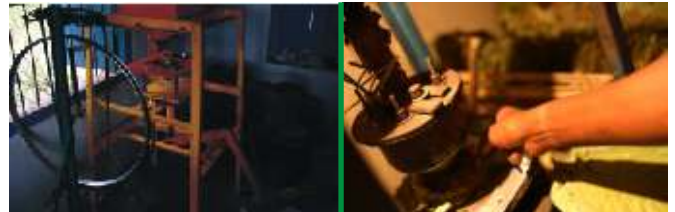


Agglomerating Sal leaves

Primary collector with stitched khali

Mismanagement of credit rather than availability of credit: banks being unaware of credit requirements of SHGs were overloaning leading to the loans being utilized for consumption and not productive purposes; low value addition in processing by the primary collectors; lack of technological innovations hampering the capacity of producers to meet the demand, and the emergence of substitutes like plastic, thermocol and paper eroding the market of Sal leaf cups and plates; **forest depletion - with felling of trees being a common practice for fuel; and poor health, education and social security issues posing a persistent and serious problem among the poor.**

UNIDO intervention and its Impact



Bio-mass steam driven Sal cup pressing machine

Traditional cup pressing machine

The objective of the UNIDO intervention was to support cluster development in a sector where the incidence of poverty is among the highest in the state, identify good practices for cluster development, and transfer them to relevant institutions for replication in other NTFP clusters. The project focused on revitalizing SHGs of primary collectors and processors and building their capacities to undertake collective activities.

Improved credit utilization

- ▶ 400 SHGs are utilizing credit in potential business activity instead of consumption. And 160 families are earning extra Rs 400 a week due to proper credit utilization and application of business plans.

Direct marketing linkage helps primary collectors to earn more

- ▶ Primary collectors were made aware of the prices of their products and a market linkage has been established with a buyer visiting one village of Sal leaf collectors every week. As the traders saw their business threatened, they started purchasing leaves at higher prices. As a consequence, across the cluster, the price paid on semi-processed Sal leaf has increased by 15 to 20 % , corresponding to an equal increase in the income of primary collectors.

Increased value addition

- ▶ Higher value addition meant higher margins and this was achieved through introduction of pressed cups using cup pressing machines; new product development (paper patri); and skill improvement for Sabai grass handicraft production.
- ▶ Improving skills in Sabai handicraft was identified as an important activity as alongside Sal leaf collection and processing , sabai rope production was a major activity, mostly by women, and also because value addition in sabai handicraft production is six times higher than for existing sabai ropes. 105 women have acquired new skills in sabai handicraft production; and a marketing forum has been established and linked to marketing agencies. 25 women are now regularly producing sabai handicrafts and earning additional income during the off season of Sal leaf production.



Primary collector with bundle of Sabai grass rope

Sabai grass handicraft

Improved health, education and insurance

UNIDO has promoted awareness about health, education and insurance services in the cluster. About 300 women and 300 children have received health education and 80 children have attended education clubs, education rallies and street shows organized by SHGs with the support of UNIDO. Women and children are adopting improved personal hygiene. UNIDO also identified an insuring agency to provide low premium products to the cluster members and organized insurance camps in the villages

UNIDO introduced appropriate technology in the form of modern sabai rope twisting machine and sabai rope making machine which has reduced the cost and doubled production. Unemployed youth are trained in sabai rope making on machine and the increased production capacity of the machine is motivating the tribal community to increase the cultivation of sabai, further reducing the pressure on forests.



SHG members at Sabai grass handicrafts training in Budhikamari village



Federation members using cycle of Singhabahini Self Help Group



A villager using Singhabahini Federation's PCO supported by UNIDO

New initiatives

Integrated Cluster Development Programme

Early in 2008, during discussions at the UNIDO HQs prior to the signing of the Country Programme for India 2008-12, the Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, Government of India, suggested launching a "cluster mapping" exercise for small and medium enterprises (SMEs) to design multidisciplinary interventions by UNIDO in the sector. Following the signing of the Country Programme, the concept was further refined to support the **formulation of highly integrated packages of services by UNIDO (Integrated Cluster Development Programme)** in selected clusters, which are already being supported under Government of India's *Industrial Infrastructure Upgradation Scheme (IIUS)*, administered by DIPP. It was decided that a team from DIPP, UNIDO, National Productivity Council (NPC) and Quality Council of India (QCI) would visit the following 8 clusters and prepare project reports for possible interventions in each of the clusters: 1. Auto cluster, Pithampur (Madhya Pradesh); 2. Machine Tools cluster, Bangalore, Karnataka; 3. Foundry cluster, Belgaum, Karnataka; 4. Foundry cluster, Coimbatore, Tamil Nadu; 5. Auto cluster, Chennai, Tamil Nadu; 6.

Auto cluster, Pune, Maharashtra; 7. Chemical cluster, Ankleshwar, Gujarat; and 8. Leather cluster, Kanpur, Uttar Pradesh.

As a first step, a joint team of DIPP and UNIDO visited the Auto cluster at Pithampur, near Indore in Madhya Pradesh, on 26 August 2008 to explore the possibility of downstream technical assistance by UNIDO for the cluster which had already benefited from Government of India's IIUS, which currently supports several activities in the cluster, namely, a vocational training centre; a tool room; and a landfill for hazardous solid waste with incineration facilities.

UNIDO South Asia goes online

UNIDO South Asia went online on 2 September 2008. The website has been set up in cooperation with the PSM/ICM Unit at UNIDO HQs with a prescribed format and the content is being uploaded from the South Asia Regional Office regularly to fully reflect the wide range of UNIDO activities in South Asia. A direct link was set on the unido.org start page to ensure easy accessibility of the website. The website can be accessed directly via:

www.unido.org/officelindia or by clicking **worldwide>directory of offices>regional offices>india** in the unido.org menu.

Regional Briefs

UNIDO Project promotes sustainable livelihood recovery in Sri Lanka



Two-wheel tractor training at Trincomalee

This ongoing UNIDO project aims at reviving the livelihood of the people in the northern and eastern

regions of Sri Lanka in both conflict and Tsunami-affected areas in the districts of Jaffna, Trincomalee and Batticaloa and consists of the following two major interventions - (1) revitalization of agriculture for increased productivity through the introduction of improved tools and machines; and (2) support to micro and small business development in agro-based industries and related services. The project, first of all, plans to assist around 3,000 households in rural communities in selected districts to revitalize agricultural activities and increase food production through the application of simple handle tools, implements and agricultural machinery including basic food processing

equipment. At the same time, it assists in product diversification in terms of increasing value addition in agricultural products through the development and promotion of agro-based micro and small businesses, based on market demand in the northern and eastern regions as well as the trade potential between these regions and other parts of Sri Lanka, especially the south. The communities are being assisted to organize themselves into self-help groups, acquiring new and appropriate tools and skills, thereby helping to establish agro-based micro and small businesses. These activities will help mobilize the participation and re-integration of the conflict-affected people - internally displaced populations, war widows and women's organizations as well as unemployed youth.

Harvesting at Trincomalee



Forthcoming Events

CP Formulation Mission to Afghanistan

The current Country Service Framework (CSF) of Afghanistan is scheduled to phase out by the end of 2008. In response to a request by the government of Afghanistan, UNIDO is planning to formulate a Country Programme of Technical Cooperation with Afghanistan: "Contributing to poverty reduction and rural development through the creation of a competitive export-oriented agro industrial sector and improving small-scale private sector development activities".

A multidisciplinary UNIDO programming mission, led by Mr. Philippe Scholtes, Representative and Head, UNIDO South Asia, will be in Kabul from 27 to 30 October 2008 to discuss formulation of the CP with government departments in Afghanistan, donor communities (EC, World Bank, country donors); and UN agencies such as FAO, UNODC etc. CP for Afghanistan is likely to cover the period 2009-13, with a focus on: agro-industries; private sector development; industrial competitiveness and trade capacity-building; and renewable energy and waste management.

Press Corner

As part of its communication initiative, UNIDO South Asia continued to project the organisation's activities in the region especially in the emerging areas of Environment, Energy and Climate Change and also disseminated through the media the findings of UNIDO's major flagship publications such as the UNIDO Annual Yearbook of International Industrial Statistics 2008:



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