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**SOME PROBLEMS IN THE MODERNIZATION OF
TRADITIONAL INDUSTRIES IN DEVELOPING
COUNTRIES ^{1/}**

by

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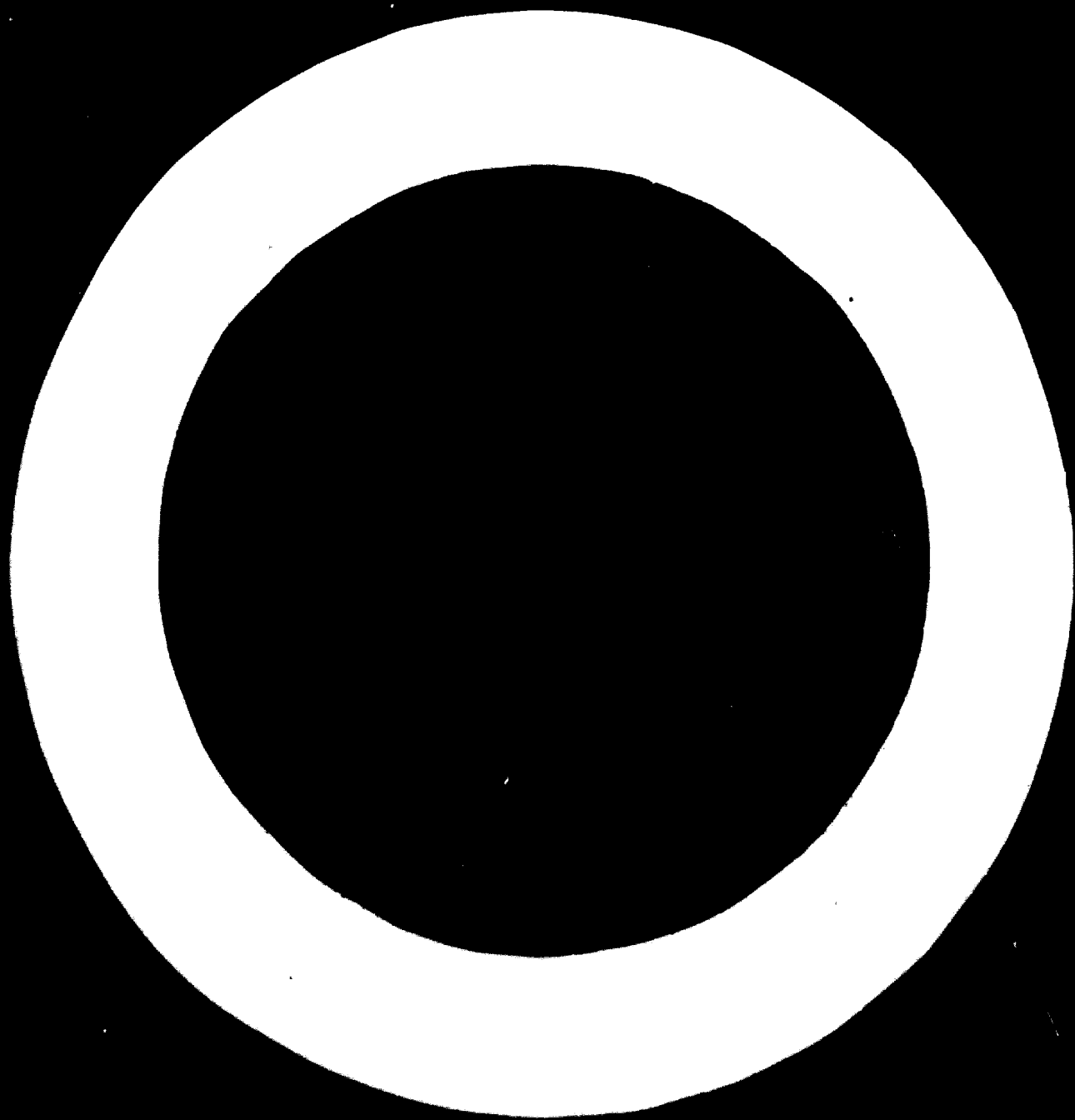
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The predominance of traditional industries in manufacturing activities is the characteristic feature of most developing countries. Historically traditional industries catered to the needs of a traditional economy. With the transition of the traditional economy to the modern, many of them should have disappeared, as it happened with the advent of the industrial revolution in the developed countries of the West. However in developing countries most of the traditional industries survived into the modern days for a variety of reasons. The most important reason is that the transition has not been fast enough for such changes. The artisans in most cases continue in their traditional trades for want of alternative opportunities. In some cases the artisans themselves are reluctant to change because of pride in their hereditary occupations. But, the primary cause for this is the lack of facilities for proper training and orientation in order to change their outlook and attitudes. Thus basic underdevelopment is the real cause of the continuance of uneconomic trades in many developing countries.

The solution which is often proposed for the problems of traditional trades in developing countries is modernization. Modernization in this context involves two processes namely - (1) modernising certain aspects of traditional trades while retaining their traditional character and (2) transformation of traditional trades into modern industries altogether.

Traditional trades which are not capable of modernization

The two processes of modernization mentioned above however cannot be applied uniformly to all traditional trades. There are certain categories of traditional trades which are not capable of improvement through modernization. These are trades which have become obsolete and for which any programme of modernization may prove to be wasteful. The obsolescence of traditional trades is the result of a variety of factors, the most important of them being the emergence of machines which can produce the goods formerly produced by artisans, cheaper, better and quicker.

Improved means of transport and communication which have brought the isolated communities of old days into closer contact have been another cause for the decline of traditional trades. Now machine made goods from all parts of the country are available off the shelf even in the remotest villages, and

therefore the services of the village artisans are no longer indispensable to the village communities.

Another cause for the obsolescence of traditional trades is the change in the social life and habits of people. There is no longer demand for highly decorated furniture, or richly embroidered garments or elaborate silver or gold tableware. New ways of life and new customs and habits have made many of these products out of date, throwing in this process the artisans producing such goods also out of employment.

The impact of new technology on community life is another factor which has contributed to the decline of some traditional trades. The demand for traditional skills in occupations like digging wells, thatching houses and making carts, wooden boxes, oil lamps etc. has declined sharply with the spread of modernization, and the artisans engaged in such trades now find that they have no place in the modern society. The intensity of the problems caused by obsolescence will vary from country to country depending on the level of development in different countries. One of the priority tasks in the industrialization of developing countries is to identify the industries which have no prospects for survival and to help the smooth transfer of people engaged in such trades to alternative occupations. Some developing countries have introduced so-called "development programmes" for these industries in the expectation that they can be stabilized and strengthened by such supports. In some cases such programmes have been introduced for want of other opportunities for absorbing the people engaged in such trades. Actually these are distress relief programmes rather than development programmes, and in the long run will prove to be unrewarding both to the government and to artisan communities. Governments have no doubt in certain circumstances to resort to uneconomic relief measures, but such measures should essentially be transitional in nature and not confused with development programmes.

Traditional trades which have a role in the modern economy

We have earlier referred to the modernization of certain aspects of traditional trades while they retain their traditional character. This process is possible only in the case of those traditional industries which have a role in the modern economy.

It will not be correct to generalize that with the transition of the traditional economy to the modern, the demand for the skills of the traditional artisans or their products will disappear altogether. On the other hand, experience has shown that certain traditional products have an assured place in the modern society.

One group of traditional products which has secured a firm footing in the modern economy is the group which caters to the demands of the affluent society. Increase in the living standards and the spread of sophistication and modernization in living conditions have led to an increase in the demand for artistic products. Traditional industries which produce such goods have acquired new strength and stability on account of this trend. These are industries which flourish notwithstanding their being traditional, but because of their being traditional. Handicrafts based on the traditional skills of the artisans or on the themes and concepts of the traditional past are in great demand all over the affluent world, and have become good foreign exchange earners for many developing countries.

Other categories of traditional products which have secured a prominent place in the modern society are those which have not only the artistic qualities of beauty and elegance but also the commercial virtues of utility, durability and individual style. Some good examples of such products are hand made shoes, handloom sarees, hand made carpets etc. In spite of the ready availability and cheaper price of factory-made substitutes, the customer has a marked preference for the distinctive quality and style of these traditional products.

An important feature of traditional trades which flourish in the modern economy is that they have adopted techniques of modernization wherever feasible while remaining basically traditional. This is a process of modernization without transformation of their basic character and form as traditional trades.

The process of modernisation may be introduced in the fields of production, marketing and organisation of traditional industries. Modernization in production processes does not mean substitution of the skill of hand by machines.

While production will continue to be dependent on the skill of hand, mechanical innovations can be introduced to relieve the drudgery of work and to improve productivity. Introduction of improved tools, implements and dies, and facilities for quick and efficient repairs and maintenance of tools and equipment are welcome services for traditional artisans.

Another useful service will be provision of common service facilities for the benefit of a group of artisans. Experience has shown that common service facilities such as mechanical dyeing, forging, electroplating, wire drawing etc. have contributed substantially to the productivity and profitability of artisan trades. It may be uneconomical for individual artisans to organize such facilities, but groups of artisans can organize such services as common service facilities on a co-operative basis. An alternative is for the government or other development agencies to provide such facilities as assistance measures for the artisans.

Supply of raw materials of the right quality and at the right prices is another service which will increase the productivity of the artisan and facilitate the process of modernization. Since the scale of production of traditional artisans is generally very small, they are obliged to buy their raw materials - metals, yarn, wood, leather etc. - in small lots and often at uneconomic prices. They have also very little means of ensuring that the raw materials are of the right quality. Arrangements for supply of raw materials of the right quality and price either on co-operative basis or by development agencies will be a great help to the traditional artisans.

Common arrangements for inspection of finished products and quality control are other welcome services for the traditional artisans. Here again such services can be organized either on co-operative basis by the artisans themselves or through developmental agencies.

There is great scope in the modernization of the marketing of traditional products. Experience of some of the developing countries has shown that sales through emporia and chain stores, display, advertisement and publicity through show rooms, participation in exhibitions and fairs and other such modern aids in marketing are of great help in expanding the markets for traditional products. Some developing countries encouraged by the demand in foreign markets

for certain traditional products, have opened show room cum sales depots in the important consumer centres of foreign countries. Fashion shows, special advertisement campaigns, sales through department stores and other such modern techniques in marketing have proved to be very effective in the promotion of sales of certain artisan products in foreign markets.

Market surveys to assess the trends in consumer tastes and demand, and introduction of new designs to the artisans based on assessment of demand are other modern devices which have helped in expanding the market for traditional products.

Artisans are traditionally individualistic and prefer to carry on their trades without associating with others in any collective or co-operative effort. One of the measures for modernizing artisan industries has been to organize them on cooperative basis or through associations for certain specific activities. Reference has already been made above to the scope for cooperative effort in arranging common service facilities, marketing etc. However cooperative effort is practicable only if there is a fairly good concentration of artisans in one locality. Common service facilities, in particular, cannot be attempted economically except at centres within easy access to all those who are to take advantage of them.

An essential pre-requisite for the success of modernization programmes is that the artisans themselves should have the motivation for modernization. In developing countries, particularly those in the early stages of industrialisation, the main task of development agencies will be to stimulate such motivation. The artisans by themselves may not be aware of the advantages of improved tools and common technical services or modern methods of marketing. Most of them are contented with the traditional techniques and tools of production and with selling their products in the traditional markets in the traditional manner. A process of training and orientation is therefore absolutely necessary if the modernization programme is to be successful.

Artisans need not only training but also financial assistance to implement the advice and training they receive about introduction of new tools or common service facilities. Shortage of funds often acts as the main hindrance to modernization even for the artisans with the right motivation.

Artisans invariably find it difficult to get loans from commercial banks and are therefore obliged to carry on their production in their traditional ways. Governments in such circumstances may have to earmark specific funds for artisan modernization programmes. Here again the problem in developing countries and particularly in those in the early stages of industrialization, is the shortage of funds for development programmes. The governments of developing countries have to allocate their scarce resources among competing demands for funds for development programmes and the needs of the artisans for modernization may often get overlooked. What is required is proper priority in the allocation of public funds for programmes of modernization of traditional trades in developing countries.

Traditional industries which can be transformed into modern

There are certain basic traditional trades which by a process of improvement can be helped to play a useful role in the modern economy. The most important among them are blacksmithy, carpentry and leather working. These skills have existed from the beginning of community life and will continue to be in demand whatever may be the changes in the social and economic life of the people. What is required is transformation of the skills of such artisans to suit the requirements of the modern age. Such transformation has to be effected in respect of (a) the products they make and (b) the technique and tools of production.

The information regarding products has become necessary because of the rapid changes in the social life and habits of the people and the impact of modern technology. The products which the village carpenters or blacksmiths used to make are either no longer in demand by the community or are readily available at the retailer's shop. At the same time the skills of the blacksmith or the carpenter can still be utilized by the community for a variety of purposes. Mechanical ploughs, welders, tractors, bicycles, automobiles, trucks, pump sets, leather and steel furniture, sanitary equipment, radios and television sets have become common features of modern life. The work involved in the manufacture, servicing, repair and maintenance of these new aids of modern life has generated the demand for new skills and it is here that the artisans with traditional skills in certain basic trades can play a useful role.

The training of an artisan with skill in blacksmithy for automobile repairs or servicing and maintenance of tractors, mechanical ploughs etc. will be a far more easy task than training an altogether new hand. Similarly a village carpenter can take to making upholstered furniture or of plywood cabinets easier than a new worker.

Experience in some developing countries has shown that inducing artisans who have deep roots in tradition to take to altogether new trades has not been always successful. The artisans are often too proud of their ancestral skills to be lured into completely new trades. It has often been suggested that the blacksmiths and carpenters of today should be trained to become the plumbers and electricians of tomorrow. But deep rooted pride in hereditary professions and sometimes, caste and tribal prejudices have discouraged the artisans from switching to completely new trades. While training and education may provide the remedy to this problem in the long run, programmes aimed at changing to entirely new professions may prove to be very difficult. A practicable solution will be to help them to enter trades where their basic skills will still be useful.

While traditional artisans have been found to be reluctant to take to altogether new trades, experience of developing countries which have introduced modernization programmes has shown that they are quite enthusiastic in adopting new techniques and tools of work. Introduction of new techniques and tools of work has been generally tried through training courses. The main limitation of the conventional training courses is that most of the artisans find it difficult to attend such courses leaving their work places. Artisans have to travel to other, often fairly distant places to attend training courses and they cannot afford to be absent from their work places for long periods. Invariably the artisan establishments are one-man enterprises and they cannot leave them in charge of anyone else. Even if the artisan has an assistant or two to help him, he cannot afford to pay them wages during the period they are away on training. This problem has been tackled in some developing countries through a system of payment of stipends for trainees or in some cases travelling expenses. The main criticism against this system is that it makes the training too expensive for the development agencies concerned.

Arranging instruction and training facilities is sufficient burden for developing countries. Payment of stipends adds to the financial burdens. Instead of paying stipends, it is therefore argued, trainees should be made to pay fees for the training they receive. Apart from relieving the financial burden of the development agencies, this arrangement will have the merit of ensuring that only those who are keen to have training come for such courses. The question whether fees should be charged for services rendered by development agencies is a general problem, not limited only to the training of artisans. While no general rule can be laid down about levying charges, it may be said that artisans as a class would ordinarily find it difficult to pay for the training courses, and would on the other hand need some financial support as an inducement for attending such courses.

Extension visits to individual artisans by experts is another commonly practised method of introduction of improved techniques and tools of production. But the obvious limitation of this method is that there is little scope for practical demonstration. The artisans as a group cannot be easily persuaded by theoretical instructions. They would like to see the improved machinery or equipment in actual working before they can be convinced of its advantages, and this will not be practicable through extension visits by experts.

In some developing countries experiments have been tried in introducing improved techniques and tools of production to traditional artisans through mobile demonstration vans. In India this has been tried on a fairly extensive scale for over fifteen years now. A mobile van is fitted with modern machinery and equipment relating to a particular trade e.g. wood working, leather working, machine shop practice etc. The vans are then taken to places where there are concentration of artisans pursuing such trades. The artisans are informed in advance about the visit of the van so that they can come to a central place during specified hours to receive instruction in the use of new machines. The experts travelling with the van then explain to the artisans the use of each machine and the advantages of the new tools and techniques. After some hours of instruction, the artisans are allowed to handle the machines themselves. Within a few days the artisans get interested in the machines and get convinced from direct experience that the machines can be worked by them without

difficulty, and that they stand to gain by adopting the improved practices and tools. The artisans may acquire a group of three or four machines and thus transform his place of work into a modern workshop. He often takes on a new programme of work with a new range of products as a result of this introduction to new machines. The vans remain in one place for four to six weeks depending on the need of the artisans. The main advantage of this scheme is that it combines in itself demonstration, training and individual consulting service and that the service is provided at the door step of the artisan.


A special feature of the Indian scheme is that demonstration and training in new machinery are followed up by arrangements for supply of such machinery to interested artisans on hire-purchase basis. The officers of the National Small Industries Corporation (NSIC), which is the Government company responsible for operation of the hire-purchase scheme, contact the artisans immediately after the demonstration, and inform them of the facilities available under the corporation's scheme to acquire machinery on hire-purchase terms, and if the artisans are interested, assist them in filling up the application forms and completing other such preliminary formalities such as sponsoring by the state Department of Industries etc. All applications received by the NSIC, whether from artisans or from new entrepreneurs, are scrutinised by a standing committee at the headquarters of the Corporation, and acceptance or rejections is intimated to the applicant ordinarily within 21 days. If the application is accepted, the applicant has to pay 20 percent of the value of the machine as earnest money. The earnest money can be reduced to 5% in the case of State Government or Bank guarantees. The balance 15% of the earnest money is payable at the time of the delivery of the machine or along with other instalments. The remaining 80% of the principal is payable in half yearly instalments over a period of seven years, the first instalment falling due after one year from the date of execution of the agreement. The facilities of the hire-purchase scheme, as already observed, are available not only to artisans but to all small entrepreneurs, existing as well as prospective. However in the case of artisans wishing to set up a new modern small industry, it is of immense assistance. The training, demonstration and consulting service combined with financial assistance has made it an extremely useful scheme in the moderniza-

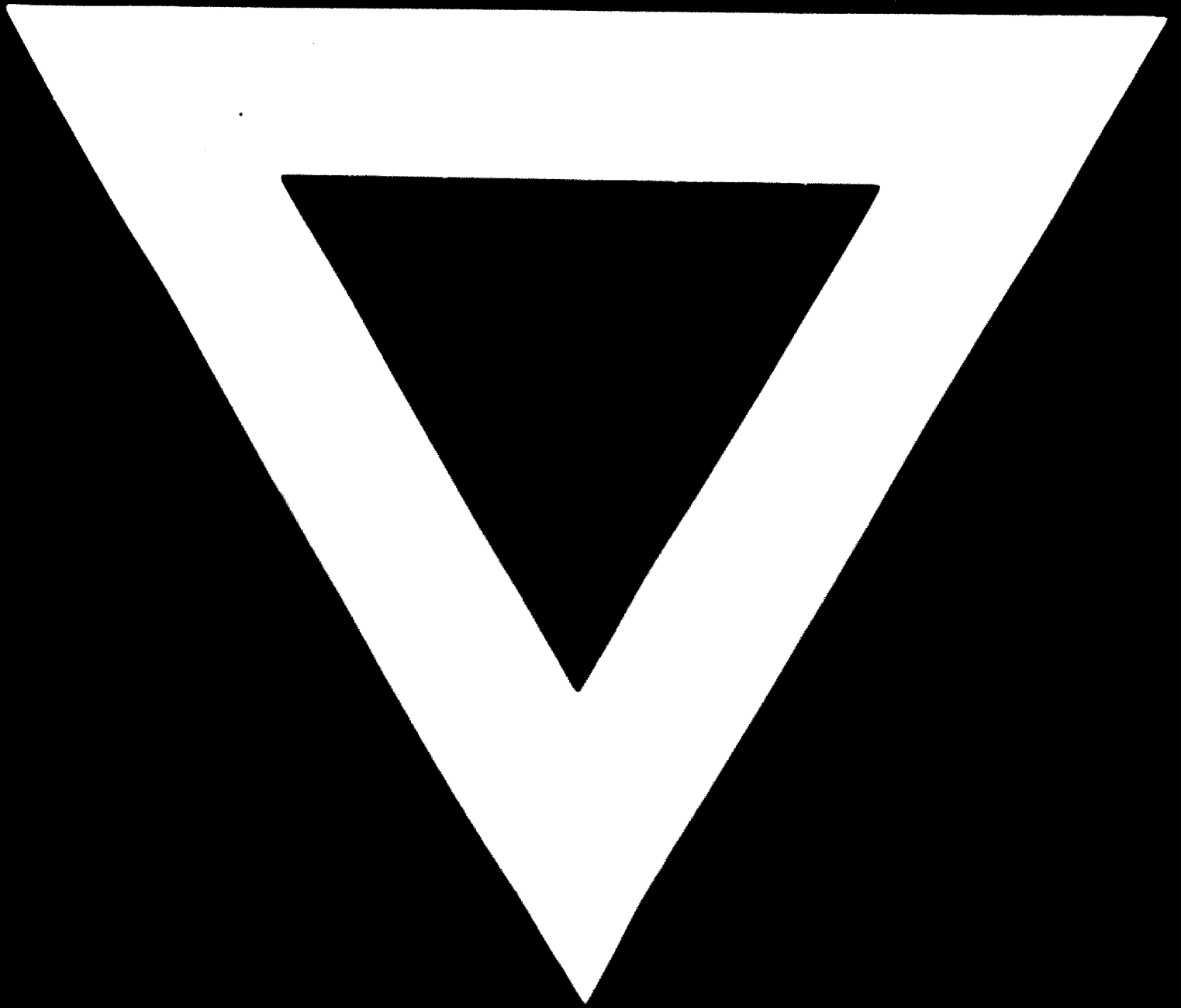
tion of traditional trades.

The implementation of this scheme over a decade and a half in India has revealed some of its limitations. The transformation of the traditional artisans to modern small entrepreneurs requires inputs other than improved machinery and capital. The most important of them is entrepreneurial abilities. While the skill of the artisan is a valuable asset in his new career as an entrepreneur, he needs considerable training and orientation to become an entrepreneur himself. Joint ventures with associates who can help in general managerial problems of the enterprise will be one solution to this problem.

Another problem in the transformation of the artisan trades into modern industries is the inherent limitation of the place where the artisan generally works. Very often such places may not have the facilities for establishment of a modern production or servicing unit. The introduction of modern tools and equipment is possible only in work places supplied with electricity. Several rural areas where the artisans now carry on their trade do not have electric supply and therefore artisans who wish to acquire modern machinery and equipment have to leave for urban or semi-urban centres with electric supply. This problem has come up sharply in the modernisation of rural industries. One obvious solution is to introduce improved tools and equipment which can be worked even without electricity. This will be an intermediate stage of modernisation, and will call for careful research and planning before application. Even in areas connected with electricity, modernisation presents other problems. Modern machines for cutting, forging, planning and other such operations no doubt relieve the drudgery of the artisan and save his time. But it is often found that the artisan does not have adequate load of work for his machines. This makes his investment uneconomic and acts as a deterrent for modernisation. The limitations of the area where the artisan works make it difficult for him to go ahead with modernisation and he may have to leave for new places of work. This raises the question whether rapid modernisation of rural crafts can be achieved without uprooting the artisans from their old places of work and forcing them into crowded urban locations.

It is obvious that the aim of modernization of traditional trades in all cases should not be transformation into modern industries. In a very large number of cases it should be "improvement" of artisan trades rather than transformation. The objective in such cases would be to make the artisans more skilled and more productive in their own trades. In some cases it may be an intermediate stage in transformation to a modern industry. Whatever may be the limitation in the transformation of some artisan trades to modern industries, the scope and need for "improvement" exists in all cases.





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