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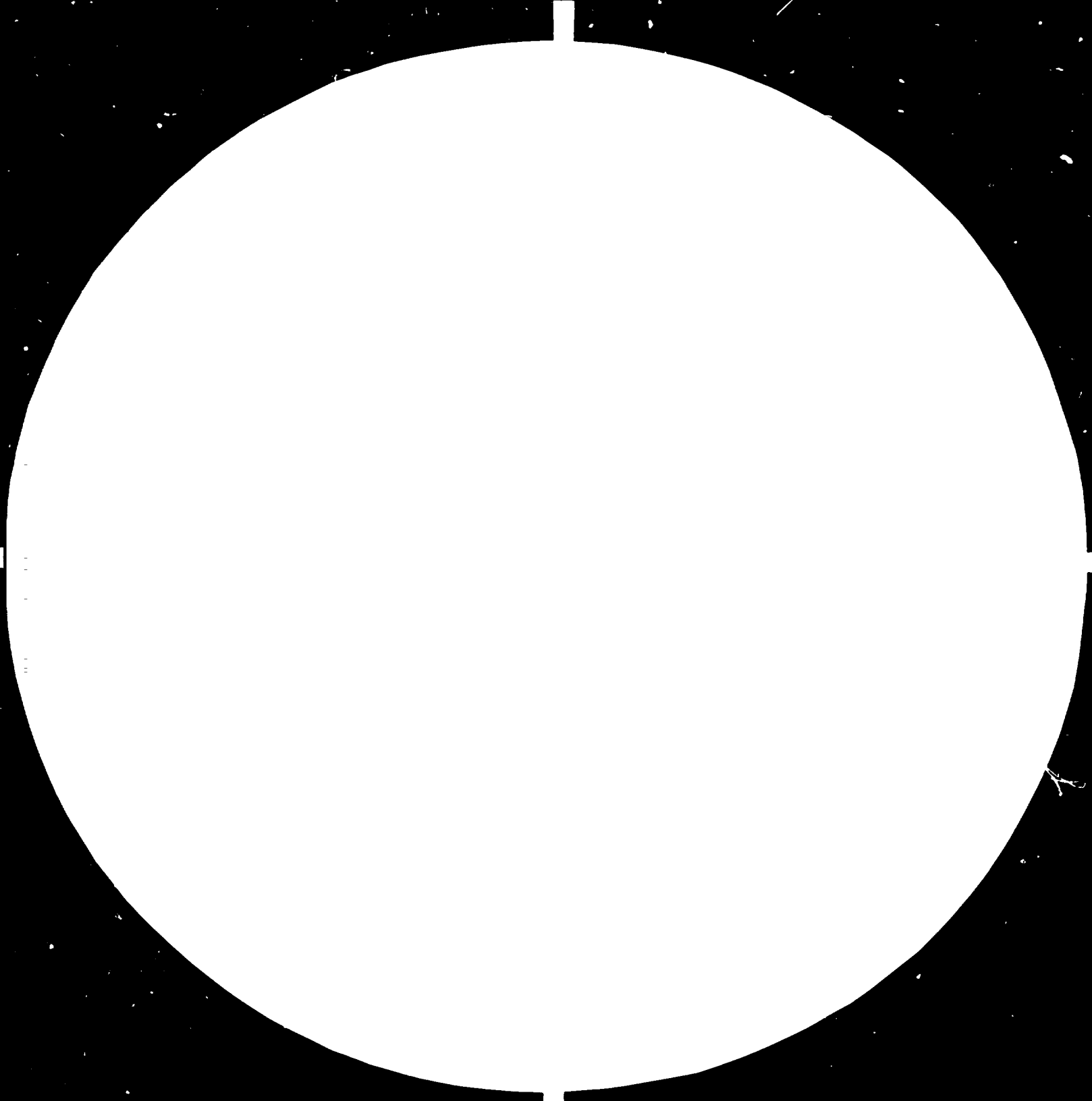
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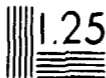




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March 1982

Republic of Korea.

ASSISTANCE TO THE INDUSTRY MANUFACTURING FISHING RODS AND
THEIR PARTS */ .

DP/ROK/72/023

TERMINAL REPORT

Prepared for the Government of the Republic of Korea by the
United Nations Industrial Development Organization,
executing agency for the United Nations
Development Programme

Based on the work of Earl F. Patterson,
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United Nations Industrial Development Organization
Vienna

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1. INTRODUCTION AND DESCRIPTION OF MISSION

Since 1973, UNIDO has been providing assistance to the Korean Government in many fields of manufacturing, resources development, management, etc. This assistance has normally been in the form of obtaining qualified personnel (experts) in various fields to work with groups such as the Korea Trade Promotion Corporation (KOTRA) on cooperative efforts within the country in many industries and endeavors.

One of the major projects for the year 1981-2 was to provide assistance to the Fishing Tackle industry, so as to improve its position in the world market place, vis-a-vis, product, quality, pricing, etc. and to bring to the Korean manufacturers any technology presently being utilized elsewhere in this industry outside of Korea. This project was aimed at assisting the country in achieving its planned export targets through developing and improving the production capacity for export products to selected foreign markets.

To this aim, a plan was devised by KOTRA and the Fishing Tackle industry for the following job:

Post Position	"Expert in Manufacture of Fishing Rods and parts
Duration	Three (3) months

Date Required	December, 1981
Duty Station	Seoul, with travel as required throughout Korea

Purpose of the Project

To improve the quality of fishing rods and its parts made in the country. The expert's assistance will be required in solving such problems as cutting, mixing of resins, designing, assembling and making ceramic rings, brass ferrules, etc.

Duties

The expert will be attached to the Korea Trade Promotion Corporation and will, in collaboration with the Corporation, assist Korean manufacturers of fishing rods and its parts to improve the quality of their products and to make them competitive in the international market. Specifically, the expert will be expected to:

1. Study the existing products and production processes
2. Suggest improvements in their products and production processes
3. Participate in seminars on manufacturing of fishing rods and its parts held for the benefit of Korean fishing rod manufacturers.

The expert will also be expected to prepare a final report, setting out the findings of his mission and his recommendations to the Government on further actions which might be taken.

Qualifications

Extensive experience in the manufacture of fishing rods and parts and related engineering, preferably supported by relevant academic qualifications.

2. DESCRIPTION OF WORK PERFORMED

According to the program, the following activities were carried out:

2.1 Study existing production processes and suggest improvements in those processes

The fishing rod industry was first started in Korea about 15 years ago with one company (that is still in rod production) and has grown steadily to over 60 companies. While this would suggest a sizeable industry, it is, in fact, made up of about six medium-to-large companies with from 60 to 800 employees, and the remaining companies employing from 15 to 40 employees.

The product is basically being produced as it was in the early years, using the same raw materials, processes and equipment, While the Korean industry has grown in size, it has not kept up with the considerable improvements made in product and process by the rest of the world's industry.

The raw material is still of phenolic resin impregnated fiberglass cloth (phenol pre-preg) that the vast majority of manufacturers elsewhere have eschewed for poly pre-preg (polyester resin impregnated fiberglass cloth) and the high modulus carbon material (graphite

cloth) for more exotic rods. Only one company visited had tried poly pre-preg and was only providing a nominal amount of product with this material. Most companies are aware of the predominant use of poly pre-preg elsewhere in the world, but feel that the extra cost of the raw material (about 25% more) is more than they can afford. This argument is invalid, since the market demands this type of product and is willing to pay for the difference in cost. Nevertheless, the industry in Korea continues to produce lower price, lower quality rods from phenol pre-preg and is excluded therefore from competing in the more profitable areas of rod sales.

After taking numerous time and motion studies in all the factories visited, I showed all the individual managers how the use of their antiquated and slow machinery was costing them money. For comparisons, I showed the cost of their present operations as compared with new and faster equipment available in the industry. I submitted also the cost of the new equipment along with anticipated savings and payoff periods for each suggested replacement purchase. Without fail, I was told that they cannot afford to make the investment because it costs too much for new equipment. When presented with figures showing an increase of productivity

of from 15% to 30% in key operations, the challenge must be on the company management to find a way to make the needed purchases. With rising labor costs and declining personal productivity of the workers, I believe that they cannot afford not to make these purchases.

The lower labor costs of Korean workers has lulled the companies into a general lack of concern for their work force's efficiency. I observed too many instances of two people doing one-person jobs, and the local management could see nothing really wrong with it. Again, I showed the cost/productivity relationship between the two methods and showed that it was definitely cheaper to use one person. The management agreed that it would be cheaper, but that it would have trouble with the workers if they tried to make changes.

With just these three items (raw material, antiquated equipment and machinery, and excessive labor costs) the Korean industry has found itself becoming more and more uncompetitive and less profitable. Until Korean manufacturers make the necessary, and sometimes substantial, changes in their operations, they will continue to be called upon to produce the less expensive products that no one else wants to make and will be

deprived of the opportunity to be a growth industry in Korea.

The Korean fishing tackle industry is basically one which is in-bred, with little input from the other companies in other countries. The knowledge of manufacturers in Korea stems basically from the original company that began production almost 15 years ago. The seven days allotted to each company by KOTRA is grossly inadequate if meaningful changes and recommendations are to be carried out. Without knowledge of different techniques, suggestions and recommendations made by experts cannot be carried out. A minimum of 30 days should be spent in each of the major companies, taking time to go into detail in the areas of rod design, material utilization, labor efficiency improvements, productivity increases, etc. The present "band-aid" approach to the ailments of the Korean fishing tackle industry is not sufficient in itself to make meaningful improvements that are necessary and needed to make this industry what it can be.

2.2 Study existing product lines and markets and suggest improvements or changes accordingly.

There are two types of companies in Korea; those presently selling in the U.S. market, and those who want

to. Those now selling wish to increase their market share, but are unsure as to how to do so. Since the U.S. market is by far the largest and most profitable one in the world, all Korean companies are most concerned about it and feel that if they do not enter this market, they will not survive in the long run. There are a variety of ways to sell in the U.S.: (1) sell to existing rod companies for their resale; (2) private brand (PB) to mass merchandisers; and, (3) establish one's own brand and market it against existing competition. The first method is, by far, the most passive method, since the manufacturers must wait to be contacted by American or European firms for business and the competition is extremely intense, leading to lower profits. The second method is slightly more difficult, and requires staff knowledgeable in this type of business. This type of business, while representing good unit volume, is not normally profitable, since the mass merchandisers, such as Sears, are very expert at getting the lowest price available, using the high volume as an effective bargaining lever. The third method is the most expensive way, but the only viable method for long term profitability. This is the most aggressive form of marketing, since the manufacturers must design a product line for his intended market, design and print catalogs, and establish a sales and

marketing staff in the U.S. to promote the product and company. At the present time, the greater majority of Korean companies are using the 1st method, selling to one of the top 8 or 10 companies already established in the industry. It is doubtful if any American consumer knows the name of any Korean rod manufacturer, and this is a serious drawback to expansion. Since this is the easiest way to increase sales, all of the Korean companies are competing for this limited amount of business, with the result that subsequent contracts for rods are becoming less and less profitable for the manufacturers in Korea.

A more serious problem is the one of product line. Again, the vast majority of companies in Korea have previously sold their products to the Japanese and European markets. These markets share product types; products that are not compatible with the U.S. needs. Korean catalogs being used in the U.S. still show predominately those products that are sold elsewhere, and not those that will sell and are acceptable in the U.S. Manufacturers do not normally determine what the market place is; the consumer does. This point is often missed by Korean consumer goods company's sales personnel.

A product line has to be designed and offered to potential U.S. customers that will interest those buyers.

Since the cost of promoting a brand name is relatively high, I would suggest that several of the companies combine their efforts and capital to establish a new brand name for the U.S. market. Each of the companies could produce a portion of the product line, allowing each company to do his job very well. A complete line of rods and reels could then be offered to the U.S. consumer, under one brand name, that could become as identifiable as any now existing. This is the only way that Korean manufacturers will substantially increase their U.S. market share from its present 16%.

The biggest deterrent to increasing market share in the U.S. market is the lack of product manufactured from poly pre-preg and graphite cloth. As previously discussed, all Korean manufacturers presently use only phenol pre-preg, and this material is not acceptable in the U.S. except in the lowest quality and lowest priced rods. Korean manufacturers must begin to produce and offer rods to the U.S. customers made from these other materials, since that is what the market demands. The vast majority of all these type rods are now being imported from Taiwan and they are enjoying the lion's share of the import business in the U.S. The only way to wrest some of this market share from Taiwan is to offer the same products as they do. This not a very

difficult job, but most Korean companies do not now have the technology or experience to do the changes. This technology is available in the industry, and must be obtained from further consulting work from other experts in the industry. I feel that there is no compromise to this change and the sooner the changes are made to other materials, the sooner the Korean fishing tackle industry will begin its renewed growth.

2.3 Seminar

On March 8, 1982 a seminar was held in the conference room of the KOTRA Building to review the findings I had made during my three months' visit. In all, about 25 managers attended, the majority of which were from companies not visited prior to the seminar. I felt that this was very good, since instead of only eight companies benefiting, over 20 companies were able to obtain the information regarding my recommendations. The seminar covered the same general subjects as this report, but each subject was expanded considerably to better explore the areas of marketing, manufacturing, and administration.

3.0 RECOMMENDATIONS

My recommendations fall into two categories; the first for the Korean Government and the second for the Fishing Tackle manufacturers themselves:

3.1 Recommendations to the Korean Government

One serious area of concern to the manufacturers is their lack of capital or borrowing ability that is needed to purchase new equipment and/or to update their facilities. Funds, with low interest rates, should be made available to qualified manufacturers that would allow them to purchase the newer, faster and higher technology equipment for their plants. Korea is still the only country of any size that is using Japanese and Korean copies of U.S. machinery. While these are fairly good copies, they are really surface imitations only, lacking the speed and sophistication of the real item. This deficiency is made up for by the manufacturers putting two men on one man jobs, since the equipment is underdesigned and underpowered to do the necessary work. If Taiwan and Japan are more competitive, one reason is that their factories are using the newest and fastest equipment available to them. This same equipment is available to Korean manufacturers also, but they are apparently unable to purchase it due to lack of funds.

The second area for the Government to investigate is that of heavy duties that are imposed on raw materials such as graphite cloth and fiberglass cloth. As pre-

viously mentioned, Korean manufacturers are using, almost exclusively, the phenol pre-preg, while the rest of the world's industry is using predominately poly pre-preg. Either the manufacturers of fiberglass cloth in Korea have to be encouraged by the Government to begin producing poly pre-preg at a reasonable cost, or the duty on foreign produced product must be reduced or eliminated so that the Korean rod manufacturers can begin to produce the needed poly pre-preg rods that are priced competitively with those of other nations. Secondly, there are no domestic producers of carbon/graphite cloth in Korea, and all of this material must be imported from either Japan or the U. S. I understand that there is a minimum duty of 10%, and as high as 40%, imposed to graphite material; a duty that raises an already very expensive material beyond the reach of the average buyer. The sale of graphite and graphite/fiberglass rods is increasing every year, but the Korean sellers are not enjoying this more profitable business since they are hampered from buying the raw material due to high import duties. Since there is no domestic industry to protect, I see no reason why the import duty cannot be eliminated for 1-2 years to enable the manufacturers to get started in production.

3.2 Recommendations to the Manufacturers

The quality of product being produced in Korea has improved during the last 3 years, but is still not the consistently high quality material being produced elsewhere in the industry. Most of the U.S. and European buyers still look to Korean companies only for lower quality, lower priced rods, since this is all they feel these manufacturers can produce. This belief is strengthened greatly by the lack of manufacturers in Korea that can or will produce poly pre-preg rods or those made from graphite or graphite/fiberglass materials. This is probably the single most important item keeping the Korean industry from growing and expanding its market share in both the U.S. and European markets. A consolidation of the industry is in order, allowing some of the smaller companies to continue to produce phenol pre-preg rods, while others are geared up to produce the poly pre-preg and graphite and graphite/fiberglass rods.

The manufacturers, in conjunction with the Government and the banking institutions, should find some way to purchase new and more modern equipment for their plants. The equipment is available to everyone, but the Korean companies are the only ones still not purchasing it to keep up with the latest technology and competition.

At almost every plant I visited, the management could immediately place an order for at least 3 pieces of equipment (totaling about USD 40,000) that would improve their productivity and efficiency by at least 15%, and reduce cost accordingly. It therefore, to me, is not a question of should you purchase, but only of when can you purchase this needed equipment. Thirdly, the top 6 or 8 companies should avail themselves of more consulting from within the industry. Since the industry in Korea is an in-bred one as previously mentioned, the only way to get new and updated knowledge into the industry is to get it from the outside. This knowledge would include pattern design, material utilization, labor standards, standard cost systems, warehousing, packaging, etc. The larger and successful companies in the U.S., Taiwan and Japan all use the most modern management tools that are available, and Korea should be no exception. The growth of the industry and the companies within that industry depend on it.

Fourth, immediate steps must be taken to design products that can be sold in the U.S. markets. Very few companies have even a few models available, and none offer a complete lineup that would allow them to successfully enter the U.S. marketplace and increase their market share. Since this knowledge is not now available to them, I again suggest that consultants from outside Korea be contracted for to assist your companies in this fairly involved and detailed work.

Lastly, I feel that it would be very helpful to the manufacturers if they would set up a "Fishing Tackle Manufacturer Association", similar to those already in existence in the U.S., Japan, Taiwan and Europe. This association would be able to obtain the latest information concerning the industry worldwide and could disseminate this information to all of its members. This information could include articles on new materials, equipment, production techniques, market trends, etc and would greatly improve the present method of knowledge accumulation. There is little real knowledge circulating in the Korean industry, but many rumors. Presently each manufacturer in Korea believes that he has the special secret for making fishing rods, and does not want to share that information with anyone. In fact, there have been little major improvements in rod design in over 25 years; most of the changes and improvements have come in new materials and improved machinery. These are the two areas in which the Korean manufacturer are lacking and this lack is causing many serious problems for them in the world market place.

