



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

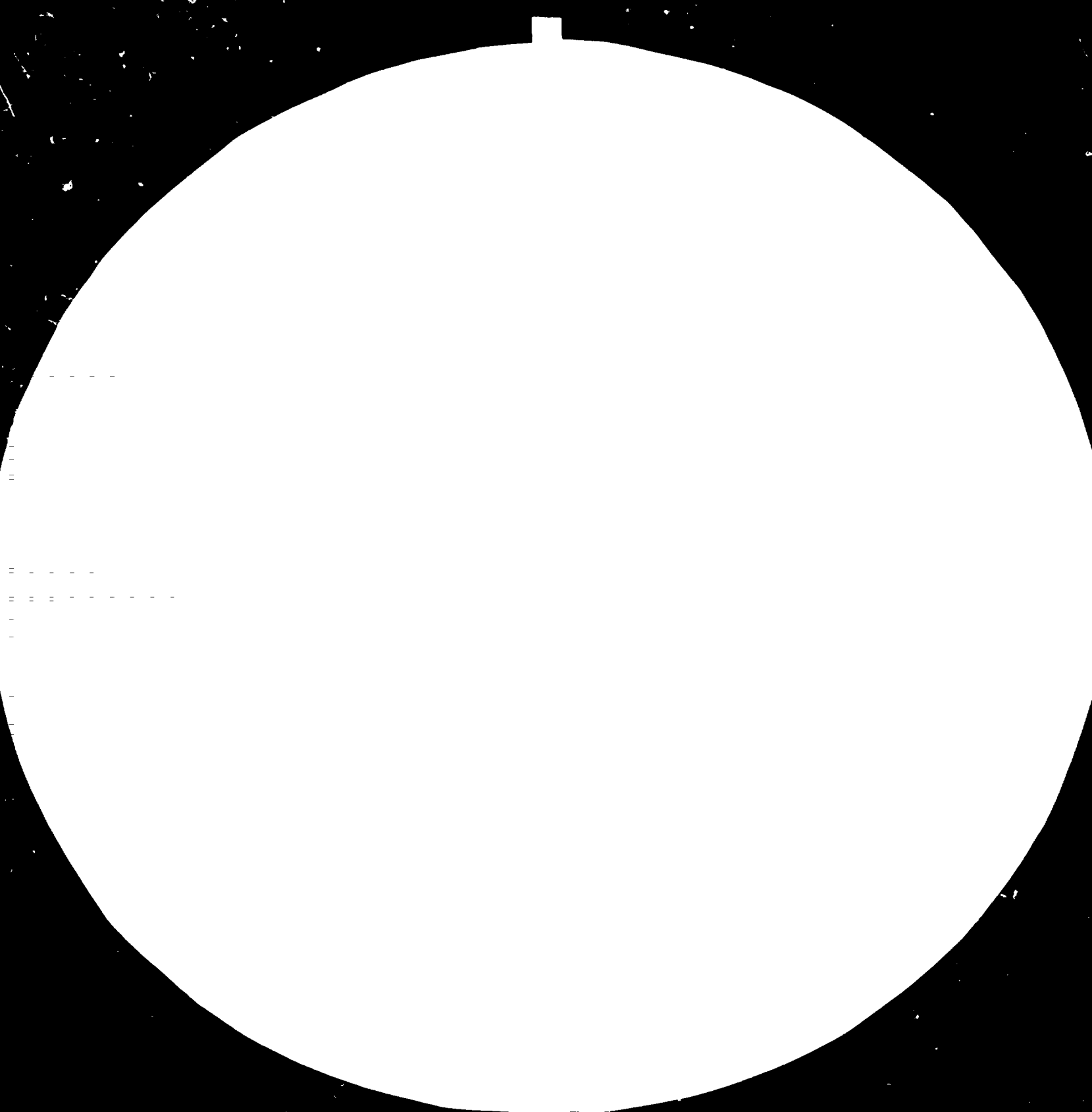
FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org





28



32



36



40



MICROCOPY RESOLUTION TEST CHART

NATIONAL BUREAU OF STANDARDS

STANDARD REFERENCE MATERIAL 2500

ANSI AND ISO TEST CHART #2

1 2 3 4 5 6 7 8 9 10

11 12 13 14 15 16 17 18 19 20

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20



UNIDO/UNDP



14355

ASSISTANCE TO THE DEVELOPMENT OF SMALL INDUSTRY
IN INDONESIA
(PROYEK DP/INS/78/078)



DEPARTEMEN PERINDUSTRIAN
DIREKTORAT JENDERAL INDUSTRI KECIL



Restricted

English

UNIDO Project INS/78/078 - Assistance to Development of
Small Industry in Indonesia

14355

Policy for Small Industry Development
in Indonesia

Terminal Report of Dr. Ram K. Vepa
Small Industry Policy Advisor

(This Report has not been cleared with the United Nations
Industrial Development Organization which does not
therefore necessarily share the views presented).

Report No.: 78
Dated : November 1984

Acknowledgement

My thanks are due to a number of officials at various levels for providing information on several aspects of Small Industry. Special thanks are due to Mr. A. Sjorjai, the Chief National Expert, for collecting the material required and translating it into English. I am grateful to the Director General, Small Industry for the guidance provided in understanding the policies in the Country.

Jakarta
November 1, 1984

(Ram K. Vepa)
Small Industry Development Advisor
INS/78/078

CONTENTS

	<u>Pages</u>
Summary	(i)
1. Introduction	1
2. Job Description	1
3. Start of the Project	2
4. Work done in Stage I	3
5. Status of Small Industry in Indonesia	6
6. Foster-Father Programme	9
7. Basic-law for Small Industry	10
8. Action Plans	14
9. Small Industry Extension Centre	18
10. Product Reservation Scheme	21
11. Sub-Contract Exchange	24
12. Infrastructure for Small Industry	26
13. Sectoral Approach to Development	31
14. Purchase Reservation Policy	32
15. Sub-Contract Studies	33
16. Short Term Consultants	35
17. Training and Study Tours	36
18. Other items of work	36
19. Training of Counterpart Personnel	37
20. Utilisation of Results	37
21. Recommendations	41
22. Conclusion	43
 Annexure : List of Reports and Papers	 44

SUMMARY

This is the 'End of Mission' Report in my capacity as Small Industry Development Advisor on policy.

2. In Stage I, the following items of work were completed :

- Review of the Project and suggestion for modification
- Preparation of a 'Handbook' for project personnel

3. In Stage II, the following tasks were accomplished

- Review of the status of Small Industry in Indonesia based on available data and selective field visits. The aspects commented upon related to : Definition; Organisation; Industrial Estate Programme; Technical Assistance; Credit; Product and Purchase Reservation; Sub-Contracting; Entrepreneurship Development; Strategy for Growth.
- Foster Father Programme .. based on study of select units, a Model Agreement was drawn up and circulated widely
- A Basic Law for Small Industry was drafted to put the entire programme of Government in a single document.
- A proposal to prepare 'Action Plans' at the Kabupaten (district) level was made and a training manual prepared to act as a guide line to officials responsible for preparing them. Such plans serve to link the national targets to the activities of the extension personnel in the field.
- A Study of Small Industry Extension Centres (PPIK) was undertaken by the Team; I did the study in West Java and also prepared an overview report making recommendation on how the Centres can be made more effective.
- The Product Reservation Scheme, embodied in a decree issued 1980, was studied; suggestions were made on criteria for reservation and incentives needed to be provided. A list of 100 products that can be reserved were listed as an illustrative exercise.

(ii)

- The 'rationale' of Sub-contracting Exchanges was explained and a proposal made to set-up two such exchanges at Jakarta and Surabaya.
 - The need for institutional infrastructure for Small Industry has been emphasised in REPELITA IV (Fourth Development Plan) which has commenced in 1984. Preliminary proposals were worked out for establishing national level centres in Information Services, Education and Training, Technology Transfer, Product Design and Industrial Services.
 - With the re-organisation of DJIK in 1984 on a sectoral basis, there is a need to combine the functional and sectoral approach. A report was written indicating how this may be done.
4. In addition, Short Term Consultants on Credit, Data Collection, Packaging and Quality Control were guided in their work. Two contracts one on Sub - Contracting in the Automotive Sector and the other on Industrial Cooperatives - were awarded to local consulting firms. Fellowships and Study Tours were arranged as a component of the Training Programme.
 5. Broadly, it may be stated the approach adopted was to improve the effectiveness of the policy frame already laid down rather than to suggest any major modifications. However the project has helped in generating a better awareness of the potentiality of the modern small sector for increasing production and employment opportunities. The traditional sector continues to be important in view of the numbers involved and the skills it embodies. It is also emphasised that being small in size did not necessarily imply low technology as in the case Electronics and Instrumentation. The need for a written agreement between the parent firm and the small units in the Sub-Contracting process was widely recognised.
 6. There is need for a Basic Law on Small Industry as the over all policy frame the development of Small Industry. The effectiveness of Extension Services needs to be improved. The nodal role of the Director-General, Small Industry, in assisting Small Units needs to be emphasised.

Policy for Small Industry Development in Indonesia

Terminal Report of Dr. Ram K.Vepa

1. Introduction

I was recruited in July 1981 by UNIDO to act as Small Industry Development Advisor for Project INS/78/078 in Indonesia and also as Team Leader of the Project. The Terminal Report of the Project which I have prepared in my capacity as Team Leader (Report No.63) has been sent to UNIDO headquarters in Vienna for clearance before presentation to the Final Tripartite Meeting. This report is the Terminal Report in my other capacity as Small Industry Development Advisor.

2. Job-Description

The job description of my post has been laid down as follows :

- To advise and assist in the planning, policy formulation, and implementation of programmes and other support measures to Small Scale Industry including creation of Mini-Industrial Estates, Common Service Facility Centres, Training and Extension-Services.
- To prepare studies and proposals for suggesting improvements to the Directorate General to the policies in respect of the promotion, growth and development of the Small Scale Industry including those on the financial assistance and technical advise by sister Government Institutes.
- To coordinate the activities of the UNIDO team of experts stationed in Jakarta, West and Central Java, East Java, and Bali and North Sumatera.
- To prepare in consultation with the Government, the Job-descriptions for the Short Term Consultants to be recruited

-- as well as the terms of reference for the work to be performed by local sub-contracts.

-- If requested, assist the Directorate General in the planning of additional regional Small Scale Industry Extension Services centres.

-- Train Counterpart Personnel.

3. Start of the Project

3.1. I reported at Vienna on July 20, 1981 and had about 18 days briefing there during which period I was provided complete background of the project together with details of the country, and its policies. I also had the opportunity at that time to talk to a member of administrative and technical sections who were likely to be concerned with my duties in Indonesia. The briefing was valuable in that it provided me with an insight into both the technical and administrative aspects of my duties.

3.2. I arrived in Jakarta on August 10, 1981 and called on the Resident Representative, UNDP, Deputy Resident Representative, UNDP and other personnel. Mr.F.M.Iqbal, SIDFA-UNIDO, was away on home leave and I called on him after his return. I called on Mr.Gitosewoyo, Directorate General, Small Industry in the Ministry of Industry and he suggested I wait a few days before I move into his office. I also met the Secretary of the Directorate General Mr.Sutadi and the Chief of the International Cooperation, Mr.S.Sjarief. Later, I also called on the Secretary General of the Ministry Industry, Mr.Agus Sujono who gave me a perspective of the policies for Industrial growth in Indonesia.

3.3. I formally started work in the Directorate General by about the end of August and sometime was taken in assembling the basic infrastructure such as Work Place, Secretary, Stationery etc.

I called on the senior and middle echelon personnel in the Directorate General. I began to collect some of the material and documents relevant to the project and found that many of them were in Bahasa Indonesia the national language of the country.

4. Work done in Stage I (August '81 - February '82)

4.1. My first task was to review the project document prepared in 1979-1980 so as to bring it up to date in conformity with the actual requirements of Directorate General, Small Industry. The following comments were made on the Project Document :

- Targets specified in Stage I (first six months) can be reached only if the speed of recruitment of personnel can be expedited; in actual practice, I worked alone during this period.
- Targets in Stage II need to be more precisely stated and also take into account the programmes actually included in the National Development Plan. In most cases, the work of the Project can only be supportive rather than independently undertaken; the linkage with the R & D Institutes would need to be specified clearly. In the case of bilateral and multi-lateral assistance, the work to be done by the project team would depend on the Agency's (DG-SI) need to receive such help. A specific target for the Industrial Documentation Expert may need to be provided.
- Job-descriptions of the Project Team were formulated in more specific terms.
- It was suggested that the number of field teams be increased to six instead of three as originally envisaged and also each team may consist of one International Expert.
- Short Term Consultants were suggested for a period of three months each in Statistical base and Data-Collection, Credit, Quality Control and Standardisation, Sub-contracting, Electronics, Food and Fruit Processing, Metallurgy and Foundry.

-- UN Volunteers for whom there was a provision for 144 m/m may not be able to provide the necessary expertise and may be substituted by National Experts who would assist the International Expert.

-- Infrastructure facilities in respect of accommodation, secretaries, typist, translators will need to be provided.

-- Coordination with other UNIDO and UNDP Programmes will need to be built-up.

The above suggestions were discussed at a meeting held in the Ministry of Industry on January 25 and 26, 1982 and were later discussed in detail at the First Tripartite Meeting held in September 1982. There was general approval for the suggestions and in addition, it was decided at that meeting to purchase vehicles for each of the field teams.

The next item of work taken-up was the compilation of a 'Handbook' providing all the relevant information to Project personnel. The handbook was divided into three parts :

- Part I Dealing with the 'People' - with chapters on the country, its customs and traditions, constitution, REPELITA (Development Plan) III and some 'do's and dont's '.
- Part II Dealing with Policies and Programmes with chapters on Industrial Development Policy, Infrastructure for Industry, the Small Industry Development Programme, and a translation of the decree relating to the organisation of the DG-SI.
- Part III Dealing specifically with the Project .. with separate chapters on tasks for the central team, field teams, short term consultants, national experts, sub-contracting, fellowships and study tours, coordination with other UNIDO projects and agencies, and reporting and monitoring procedures.

The Handbook (of about 225 pages) was provided to each member of the project team so as to familiarise him or her with the country and the policies and the specific work expected to be done. The general feed-back from the members of the team was that the 'Handbook' was very useful as a source of information and obviated the need for each team member to search for the material on an individual basis.

- 4.3. Early in 1982, the Project office was moved out of the Head office of the DG-SI and located into a private residential house along with other bilateral projects. This physical separation from the head office made integration of the project with the work of the DG-SI more difficult and this problem continued right throughout the project. In January 1984, the project office moved again to a government building.
- 4.4. In January 1982, Mr.D.Cannas, the backstopping officer at the UNIDO Headquarters, visited Indonesia to participate in the Review Meeting organised by the Ministry of Industry and took the opportunity to call on the Director General, Small Industry and other senior officials of the Government. He also made field visits to Yogyakarta and Surabaya where earlier a UNIDO project had operated till early 1980.
- 4.5. The Work Plan for 1982 was drawn-up for the team as a whole and was approved by the DG-SI. However, since the project team consisted only of the Team Leader, it was difficult to estimate precisely how much of the Work Plan could be implemented. Meanwhile, the nominations pending for several posts with Government were discussed and recommendations made for an early decision by Government. On this basis, two members of the central team - one on Information (Mr.B.R.Kohli) and one on Training (Mrs.H.R.Fajardo) joined in February and April 1982 respectively. However, it was not till August 1982 - fully one year after the project had commenced that the field experts began to arrive.

5. Status of Small Industry in Indonesia

5.1. The next item of the work undertaken was to make a broad survey of the status of Small Industry in Indonesia. This was based on study of all the available literature as well as field visits undertaken to Bandung, Yogyakarta, Surabaya and Bali to get an idea of the Small Industry units in the country. The results of this study were embodied in a Report issued in July 1982 entitled 'An Interim Report on the Development of Small Industry in Indonesia'.

5.2. The Report surveyed the current status of Small Industry in Indonesia under the following headings.

-- Small Industry in the National Economy; Scope and Definition
Organisation; Industrial Estate Programme, Technical Assistance;
Credit and Fiscal Incentives; Product Reservation; Purchase
Reservation; Sub-contracting; Entrepreneurship Development;
Strategy for Development of Small Industry.

Drawing upon the experiences of other countries, mainly Japan and India, the Report made a number of recommendations, the more important of which are the following :

-- Definition may include servicing activities including repair and maintenance shops.

-- The current restriction on capital per investment person not to exceed Rp.625,000 (at that time US\$1,000) may be relaxed.

-- A separate category of 'Very Small Industries' may be made with capital investment not exceeding Rp.10 Million.

-- The Directorate General Small Industry may be organised on sectoral basis to include Food; Metal; Electrical and Electrions; Leather; Chemicals and Plastics;

- Each of the KANWIL offices may be strengthened by at least three technical experts in areas relevant to the region.
- Procedures for starting new units may be streamlined and decentralised as far as possible; for the 'very small units' this may be at the kabupaten (district) level.
- A National Small Industry Board may be set-up with representatives of Government, Industry and Banks to periodically review and monitor the policies towards the small scale sector.
- The cost of accommodation on the Mini-Industrial Estate may be graded according to the region in which they are located; in metropolitan areas, the full market value may be charged while in the backward regions, it may be subsidised.
- An 'institutional' mechanism may be necessary to engineer the processes developed at the R & D Institutes as well as to import suitable technologies from abroad. A National Technology Development Corporation may be set-up for this purpose.
- Testing facilities may need to be set-up so as to be accessible to Small Units at nominal cost.
- A separate credit policy towards the small industry units may need to be formulated; 'soft' loans for Modernisation and Expansion may be provided.
- The criteria for product reservation may be laid down clearly. The scheme needs to be backed by other measures to make it effective. It may be monitored by a high level committee which will review the working of the scheme from time to time and consider the inclusion of additional items.
- The working of the Price Preference Scheme may need to be studied to see how benefit accrues to small producers instead of the middlemen.

- The 'Foster-Father Scheme' is excellent in principle; however, in practice it needs to be firmed up through a written agreement which is monitored by the KANWIL office. In granting permissions to new large and medium units, the sub-contracting aspects may be examined. Sub-contracting Exchanges may be set-up at Jakarta, Surabaya and Medan for executing orders of the large units.
- Mobile Demonstration and Training Centres may be operated to provide rural artisans with opportunities to improve their skills and products.
- Action Plans may formulated for each region to reach the macro-targets set in the national plan.
- ** A 'Basic Law' for small industry may be decreed to provide a comprehensive policy frame for the growth of small industry in Indonesia.

5.3. In General, the Report made the following broad approaches :

- The policy frame already formulated is sound in principle but needs to be implemented more effectively. What are needed are not new schemes or policies but steps to ensure that those already decreed do yield the results intended.
- A distinction needs to be made between the modern Small Scale and the traditional artisan sectors. While the latter is undoubtedly important in terms of numbers and traditional skills, it is the former that can contribute significantly to the growth of the sector and consequently to new employment opportunities.
- Again, the very small units - most of which are in the traditional sector - will need a 'special package of assistance' in view of their weak economic position.

- Smallness of scale does not necessarily imply a low level of technology; in such areas as Electronics, low investments can produce a fairly sophisticated range of equipment and systems. This needs to be encouraged as it will provide a challenge to the growing technological capabilities of the country.
- The organisation of the DG-SI may be sectorally oriented - rather than purely functional; this will enable growth of the sectors to be planned more effectively.
- A 'Basic Law' may be formulated to provide a comprehensive policy frame for the growth the small industry.

6. Foster-Father Programme

- 6.1. A more detailed study was take up of the 'Foster Father Programme' in the country. This is a variation of the Sub-Contracting concept and is meant to link large or medium units to a number of small units to whom assistance is provided. Nearly 40 such 'schemes' have been designated by Government to act as 'Foster-Father' - many of them Government owned
- 6.2. The broad conclusions of the study, based on illustrative field visits, are the following :
 - Many of the Schemes have not yet begun to operate effectively; in many cases, the 'parent' units view it merely as a means of selling their products while the small units do not seem to be fully aware of the need for quality and timely deliver of goods.
 - The selection of the 'Foster Father' needs to be done with great care - in some cases, meaningful market assistance was not provided to the small units since the large units were not geared to do so.
 - The element of marketing assistance is noticeably absent from many of the schemes which are confined to supply of inputs - specially those made by the parent unit.

-- No specific stipulations regarding delivery schedules and quality of goods are made nor is there any protection for timely payment for supplies made and unfair rejection of goods supplied.

6.3. To over-come the above problem, it was suggested that a written agreement be entered into between the parent unit on the one hand and the small units on the other. The draft of such a model agreement was drawn-up to provide for specific obligations of the parent unit as well as of the small units and for various forms of assistance by the unit such as supply of raw materials, technical designs and drawings, credit, and most importantly, guaranteed off-take of about a third to half of the production of the small units. Sub-contractors may form themselves into cooperatives to negotiate on better terms. Any dispute between the parties may be referred to the KANWIL office for arbitration; the KANWIL office will act as a third party to monitor the agreement.

7. Basic Law for Small Industry

7.1. The development of small industry has been accorded a high priority in the Third Five Year Plan as well as in the Fourth Plan, currently in progress. A separate Directorate-General of Small Industry was set-up in 1978 and a number of programmes Mini-Industrial Estates, Product Reservation, Purchase Preference, 'Foster-father' - have been initiated to encourage the growth of the Small Industry. It is considered that a time has come to 'weave' all these elements of the Development Programme together into a single coherent pattern in a 'Basic Law' which will be the basic decree for the over-view of the development programme.

7.2. The Draft of such a Basic Law was drawn-up as a preliminary exercise. In the preamble to the draft, the need for such a law in the context of the Fourth Five Year Plan during which the Small Scale sector is expected to be a vehicle for growth as well as

for creation of new jobs is emphasised. Further, it is stated in the Preamble that the proposed decree is meant to clarify government's whole-hearted support to the small scale sector.

7.3. The Basic Law, as drafted, consists of 57 articles in 15 chapters dealing with :

- Definition;
- Organisation;
- Mini-Industrial Estates;
- Supply of Machinery;
- Raw Material;
- Credit;
- Industrial Extension;
- Transfer of Technology;
- Product Reservation;
- Sub-contracting;
- Fiscal Incentives;
- Intensive Campaigns
- Reporting;
- Conclusion.

7.4. Under 'Definition', a distinction is made between Cottage (Home) Industry, Village Industry, Small Industry, Small Enterprise, Medium and large industry, a Sub-contracting Industry, and Handicrafts.

7.5. Under Organisation, the role of the Directorate General, Small Industry (DG-SI) is clarified as well as that of the Director General himself as the Principal Advisor to Government on all matters affects the Small Industry. He will be assisted by a Secretary and Directors as well as Technical Advisors in specified sectors. A National Small Industry Board may be set-up to advise Government on policies to be pursued and review the implementation of such policies from time to time.

- 7.6. In the chapter on Mini-Industrial Estates, there are articles dealing with the establishment and management of such estates, facilities to be provided on the estate as well as the procedure for allotments to be made on the Estate. There is a separate chapter on the supply of machinery on a hire purchase or lease basis; similarly, a scheme for supply of raw materials directly to the small units - specifically those that have to be imported is suggested. It has been provided that Government may procure the raw materials and distribute them at a fair price to small units.
- 7.7. A Credit Policy is to be formulated by the DG-SI in consultation with the Bank Indonesia; the present programmes of KIK and KMKP may be reviewed to see how the share of small industry can be increased. The coverage of Credit Guarantee Schemes may be extended to cover all the small units and procedures for such coverage simplified. Collateral requirements for small units may be made as liberal as possible. It has been provided that the operation of the credit policy may be jointly reviewed by the DG-SI and Bank Indonesia; the DG-SI will provide assistance to the Bank in appraising loan applications.
- 7.8. Under Industrial Extension, the patterns of technical assistance have been specified to include both the hardware (CSF, Test Centre) as well as software (training, counselling). For transfer of technology, a separate institution - National Technology Development Corporation - may be set-up to lease patents for Industrial utilisation, to import technology and set-up pilot demonstration plants.
- 7.9. Under 'Product Reservation' Government will have the power to draw-up a list of products to be produced exclusively in the small sector. Such products will then be phased out of production by the large and medium firms over a reasonable period of time (say, 3-5 years). Package Assistance Programmes may be formulated

for production of items in the reserved list. A Review Committee may be set up to monitor the implementation of the scheme - and all product reservation may be considered as time bound and automatically lapsed after a period of 5 years.

7.10. Similarly, purchase reservation in respect of certain products, and price preference in respect of others, may be done by Government which will be binding in all agencies and institutions supported by Government. Such Reservation may also include special provision for cottage units.

7.11. Sub-contracting will be encouraged as a deliberate policy and the relationship between the parent unit and the small units regulated by a written agreement and monitored by the Government agency. Sub-contracts Exchanges will be operated by the DG-SI and tax concessions provided to encouraged sub-contracting.

7.12. A package of fiscal incentives may be provided to include :

- .. Tax holidays for specified periods (3-5 years);
- .. Credits on Soft-loan terms with minimum of collateral;
- .. Higher development rebate and accelerated rate of depreciation;
- .. Subsidy for transport and power;
- .. Duty free import of machinery, equipment and raw material;
- .. Higher import duties on consumer durables and luxury goods from abroad;
- .. Easy availability of foreign exchange for all essential inputs.

7.13. There are articles an 'Intensive Campaigns' in each region of the country to make aware of the possibilities that exist and to interest potential entrepreneurs. The need for data-collection is emphasised in another provision and a full census - at least once in ten years - is suggested.

7.4. In conclusion, it has been suggested that the DJ-SI function as the 'friend, philosopher and guide' of the small entrepreneurs and help to resolve their genuine problems by interceding with other departments and agencies in Government and outside.

8. Action Plans

8.1. Planning is done at the national level while implementation is at lower levels - provincial, district (kabupaten) and even village (Desa). However, there is often a dichotomy in the perception of these plans -- by personnel formulating them and those responsible for its implementation. Targets set at the national level do not have much meaning for those operating at grass root levels .. and, hence, there is no clear knowledge by the lower level personnel how the targets are to be attained.

8.2. One method of bridging this gulf is through the preparation of Small Industry Development Action Plans (SIDAP) which represent a means to mobilise all the resources available in the region for its economic development. This involves not only the identification of industrial opportunities but also the development of the supporting structure through optimum utilisation of existing institutions as well as creation of new facilities required for the fulfillment of the plan.

8.3. Any Action Plan for Small Industry Development can not be an isolated exercise and has to fit into a wider plan for regional and national development. This involves a clear understanding of at least the major scheme for the development of other departments in the region so that they re-inforce and support the programmes of small industry growth; such growth requires power, water as well as a pool of skilled workers.

8.4. The principal elements of an Action Plan are the following :

- . Part I : Formulating the Plans
 - .. Introduction
 - .. Resources
 - .. Economic Development Plans
 - .. Existing Industry Sector
 - .. New Industrial Opportunities
 - .. Inputs Required

- . Part II : Implementing the Action Plans
 - .. Identification of Growth Centres
 - .. Infrastructure requirements
 - .. Credit Requirements
 - .. Training Programmes
 - .. Technical Support
 - .. Marketing Assistance
 - .. Targets and Inputs - year wise.

8.5. A crucial aspect of the Action Plan is the listing of new industrial opportunities. Based on the raw data compiled, and taking each of the sectors - agriculture, forest, mineral, fishery, dairy, livestock - one can estimate the type of industrial utilisation and the number of economically viable units that can be set-up keeping in mind the likely demand. In addition, consumer products need to be made to cater to local demands. Special requirements of bulk purchases may also be considered in drawing-up a list of candidate industries and linkages with large and medium industries in the region may be formulated. There may also be a small but significant possibility of exports from the region which need to be identified.

8.6. Once a listing is done of the new opportunities, brief 'profiles' may be prepared on each of them which can be expanded into a 'bankable' feasibility study when an entrepreneur evinces interest in any of them. A separate programme is being conducted by the Industrial Engineer, Jakarta on the methodology

of drawing-up such studies, then the infrastructure requirements for setting-up such units has to be estimated both in human and material terms. What would be the power and water requirements for such a development? How many industrial estates are necessary to provide for the new units? How much of credit would be necessary to finance these units and so on.

8.7. The next phase of the Action Plan is the implementation aspect; to optimise the scarce resources available, it may be necessary to identify 10 or 12 Growth Centres in each region which possess the necessary infrastructure and are traditionally focal points for the region in terms of transportation, marketing etc. Once the growth centres are identified the cluster of new industries that can be set up in each centre will need to be determined. As development proceeds, a pattern begins to emerge - some clusters may be wood based, some metal based, some in chemicals, some in metals and some purely for sub-contracting.

8.8. The next steps is the identification of entrepreneurs which depends on the awareness created in the region about the Plan. One tried technique to do this is the method of 'Intensive Campaigns' which are basically an attempt by all the concerned agencies - notably the financing institutions - to create interest in potential entrepreneurs and cut through the red tape which often hinders speedy implementation. Through such a process, a normal time frame of 6 months to one year can be compressed into a few weeks.

8.9. After the entrepreneurs have been selected, they may undergo a brief Training Programme so as to familiarise themselves with Government rules and regulations as well as various aspects of running a small business. The main purpose of such a programme is not to give book knowledge but something they can readily use in their operation. How to pick a winner, is an exercise that depends as much on intuition as on luck. Although, there has been considerable progress in developing objective tests to

determine the latent entrepreneurial capabilities it is still a matter of good judgement and some luck.

- 8.10. But such entrepreneurs, once selected, need to be supported in technical, financial and marketing areas if they are to succeed. This is a field where the promotional agency needs to exercise a great deal of patience and understanding. Financial assistance has to come from the Bank and the promotional agency can perform a useful function in bridging the out-look between the entrepreneurs and the bank. In regard to technology, the entrepreneurs will need guidance in the choice of machinery, which often determines the choice of technology, as well as the sources from where they can be obtained. In Marketing, while the primary responsibility to sell his product is on the entrepreneur, there is much that a promotional agency can do to assist in providing market intelligence, and helping in responding to government tenders for bulk purchase. There is also a considerable opportunity through sub-contracting to large firms which can be facilitated by the establishment of sub-contracting exchanges.
- 8.11. Finally, Action Plans need to be broken-up into annual plans and for the extension personnel, it is the Short Term annual plan that is relevant and meaningful. Such Annual Plans need not be static rigid, they must be flexible and dynamic but none the less, an annual plan provides a reference frame for all those engaged in the development programme.
- 8.12. There is need to monitor and evaluate the Action Plan; a good plan on paper may be satisfying to the planners but unless implemented effectively, does not achieve the purpose intended. In actual execution, many problems crop-up not envisaged originally and these need to be solved so as not to affect the implementation. Hence, a close monitoring and evaluation system is essential if the Action Plan is to produce results.

8.13. For this purpose, an Information system has to be set-up which supplies the desired information periodically. Information needs to be provided from the field to a central point on the existing industrial units, new units and the establishing of infrastructural facilities. Such information obtained, once a quarter, can be analysed and quick remedial action taken to cover any deficiency. At the end of the year, a broad evaluation of the Programme can be made and intimated to the Policy planners who will then determine whether any changes in the policy are required to reach the basic targets. For instance, if additional production and employment are the basic criteria of development, emphasis should be on reaching those targets. Inrespective of the nature of industry chosen

8.14. Successful execution of any plan requires constant vigilance and a willingness to respond to changing field conditions: while the plan targets must be regarded as fixed, they can also be changed to serve the broad socio-economic objectives of the plan. This can only be done if the promotional agency responsible for that portion of the plan, maintain a close watch on how well the plan is faring in practice. Information is the heart of monitoring and evaluation and it is well worth setting up a simple information system on whose output one can rely.

9. Small Industry Extension Centres

9.1. Study of the Small Industry Extension Centres (PIIK) at five locations was conducted by the team with a view to determining how well they were operating and how their performance and utility to the entrepreneurs could be improved. These centres (about 9 of them) were set-up to provide a 'single window' service to the entrepreneurs based on an earlier UNIDO Project at Yogyakarta and Surabaya where it was tried in on a pilot basis. Of the nine Extension Centres, seven of them fall within the project area.

- 9.2. The Industrial Engineers at Jakarta, Semarang, Surabaya and Yogyakarta conducted the study relating to the centres in their respective regions; since no expert was available at that time at Bandung, I conducted the study and also prepared an over-view report highlighting some of the common problems that affect the centres and also some policy considerations to make them more effective.
- 9.3. The PPIK is normally a part of the BIPIK (Programme for the development of Small Industry) programme located in the KANWIL (Provincial) Industry office. The PPIK has besides a Secretary, separate sections dealing with Technology Assistance, Marketing Assistance, Credit, Organisation and Management. It has a few Technical Service Centres (UPT) dealing in specific products; normally, the number of such centres is 4 to 5. It has also a Market Promotion Centre, and an Information Centre attached to it. At the field level, there are extension officers who interact with the individual units.
- 9.4. The following are some of the important recommendations made in the over-view report :
- The concept of a 'one-stop' service to the entrepreneurs through the PPIK is a valid one and may be extended. Such service should include both 'software' (as at present) as well as hardware.
 - The Technology Assistance Unit needs to be enlarged so as to cover all relevant disciplines and should advise entrepreneurs on suitable machinery requirements for their project.
 - The relative roles of the Market Promotion Centre and Market Assistance unit may be clarified; the former may develop to undertake commercial and quasi - commercial activities while the latter provides assistance through market intelligence, exhibitions, etc.

- The Information Centre needs to play a more dynamic role as a focal point for all information from and to the field.
- The Credit Assistance Unit may be empowered to charge a small fee (0.2% of the loan applied for) for the appraisal reports to the banks, which may be collected, only if the Bank sanctions the loan on the strength of the report. This will enable the unit to assist larger number of entrepreneurs and also improve the quality of the services.
- The utilisation of machinery and equipment in the Technical Service Centre (UPT) is low due to several reasons : non-installation of machinery, lack of skills of the operators etc. It is desirable to review why this is so and to take steps to improve the capacity utilisation percentage.
- Entrepreneurs, who are capable may be allowed to operate the machinery at the discretion of the manager UPT.
- UPT's may be allowed to take-up jobs from the large units at actual cost, provided such jobs are not at the expense of the small units.
- Operating expenses of the UPT (excluding overheads, depreciation etc.) should be met by the revenues earned at least after a period of 5 years.
- Association of qualified personnel with the work of Extension may be secured through consultants from the open market, expertise available in government companies, and through a panel of consultants whose services can be re-imbursed partially by the PPIK.
- It is somewhat unrealistic to expect the field extension officer (TPL) to be a 'miracle' worker; the main function of the TPL should be to provide a 'live link' with the industry - which can only be done through frequent visits to the units.

- The 'diagnostic' ability of the TPL needs to be enhanced so that he is able to identify the problems of a unit and formulate them in specific terms for reference to the PPIK or higher up for a solution.
- Each TPL may be given about 100 units to 'nurse' which will provide him with reasonably compact area to do travel and work. The TPL may be required to make about 25 Intensive visits and 250 casual visits per year.
- A separate Training unit may be set up in each PPIK to coordinate all training functions - of the entrepreneurs, extension staff and artisans. The work may also be entrusted to the O-M (Organisation and Methods) which is at present lightly loaded.
- Monitoring Procedures laid down by the Director General Small Industry are well formulated and adequate. A Monthly Report on the performance of the field personnel may prepared and put up to the Head of the PPIK. An annual evaluation of the performance of the TPL may be done on the basis of clearly laid down norms informed well in advance to the staff and suitable rewards given to the best TPL at the Kabupaten, DANWIL and National Levels.
- 'Service to the Entrepreneurs' is to be regarded as the primary focus of the work of the PPIK. A good beginning has been made in setting up the framework of extension through the PPIK; what is needed is greater motivation on the part of the staff, a better awareness of the needs of entrepreneurs and a 'sharpening' of its image.

10. Product Reservation Scheme

- 10.1. -- In November 1980, a decree was issued by the Ministry of Industry to reserve 127 products for exclusive production in the small sector; the products reserved cover a wide variety of sectors - food and fruit processing, textiles, leather, rubber plastics, printing, metals and machinery, electrical appliances,

transportation, wood, chemicals. Most of the items are simple and are even now predominantly undertaken in the small and cottage industry sectors; many of the items relate to initial processing and not the finished product - what is being reserved is the first stage of the production process. Some of the items relate to service activities such as repairing, bottling, salting etc.

- 10.2. It was considered useful to undertake a systematic evaluation of the scheme. It was noted that there was insufficient awareness of the scheme amongst the government personnel and, even less to amongst the entrepreneurs. The product description given in the decree are not always clearly identifiable since they were distinguished by the machinery employed. Sometimes, the scope of activity was not clearly indicated: one item mentions merely riceflour, soyabean intended and green pea flour - it was not clear whether what was intended to be reserved was only the grinding and milling or whether allied processing operations were also also meant to in included.
- 10.3. In the decree it has been mentioned that where production of these items is undertaken at present by large and medium industry, it will be transferred to the small scale industry within certain limits through current licensing procedures. The specific mechanism by which this is proposed to be done has not been indicated clearly. It may be necessary to provide a definite time limit - three to five years - before production is sought to be phased out. While in the current decree, the 'over lap' products between the large and the small sectors may not be significant, it will become some once the small sector develops. Again, the small sector may itself be a threat to the cottage industry sector and a certain measure of protection to the latter either through Reservation or through fiscal measure may be necessary.
- 10.4. According to the field data analysed, the total number of units making products reserved in the small sector is little more than

40,000 which is about 36% of the total number of small units in the country according to the 1979 census of the Biro Pusat Statistik (Central Statistical Bureau). Of these, 60% of the units are located in nine provinces (of which all except South Sumatera are in the Project Area). In terms of employment, the reserved units account for 300,000 persons (out of a total of 837,055 engaged in the small sector) and a production of Rp 209 Billion (out of total Rp 600 Billion for the entire small sector in the country). Thus the 'reserved' product units constitute a significant percentage (about a third) of the total for the small sector in the country.

- 10.5. To monitor the working of the scheme, at the field level, Data Analysis sheets may be prepared for each product at least once a year. Such sheets would provide information on production, price, quality, availability, marketing and other problems. A Package Programme of assistance - including such items as preferential allocation on the Industrial Estates, availability of credit, supply of raw materials, assistance in marketing, facilities for testing may be formulated to enable the units making reserved products to function effectively.
- 10.6. The working of the scheme needs to be monitored closely at the National and Provincial levels. At the centre, a standing committee with the Director General, Small Industry as Chairman and Representatives of all other agencies concerned as members may be set up to review once every three months the progress of the scheme, provide clarifications and recommend any modifications, including additions to and deletions from the list. Any product proposed for reservation must normally satisfy the following criteria: proven capability for production in the small sector, potential for growth, stable technology, easy availability of machinery and raw material, no special marketing problems, no significant export angle, and no special restrictions in terms of safety, health and pollution hazards. An illustrative list of 100 products that may be considered for reservation has been drawn up for consideration.

10.7. The principle of 'Reservation' has to be implemented judiciously and should not be seen as an undue protection to the small units. Where the scheme results in high price or poor quality to be consumer, there should be no hesitation in modifying it. It may be stipulated that all reservations may lapse automatically after a period of five years unless a specific decision is taken to continue them. Reservation is meant as an assistance to the small units to overcome disadvantage of size and not as a permanent crutch.

11. Sub Contract Exchanges

11.1. Sub Contracting has been defined by UNIDO, as a 'relationship when a company (called a contractor) places an order with a another company (called the sub contractor) for the production of parts, components and sub-assemblies by the contractor'. There are, in practice, a number of variations of sub contracting : it may be for cost saving or capacity reasons; it can be steady on a long term basis or merely a 'one shot' order. Normally, specialised sub-contracting is of the former type while capacity sub-contracting is the latter. While many developing countries favour the long term relationship, short term sub-contracting also enables the spare capacity of small units to be utilised more fully.

11.2. Whatever the pattern of sub-contracting, there must be tangible benefits to both parties, if it is to be successful :

-- For the contractor, it offers the advantage of

- economising on capital and labour
- lower cost of product due to lower undertaken of the large firm and lower wages and overhead of the small firm
- specialised skills of sub-contractors
- a 'buffer' against demand fluctuation

- For the Sub-contractors (usually a small or medium unit) it provides :
 - a ready market;
 - technical and raw material assistance from the parent 'firm'.

A typical list of parts and components considered suitable for sub-contracting in the automotive field was drawn-up.

- 11.3. In an earlier study, a model agreement has been suggested between the large unit and the small unit. It may also be desirable to consider the establishment of a specific institutional device known as the Sub-contracting Exchanges; in the current project two such exchanges were to be set-up at Jakarta and Surabaya, which are both industrial growth centres and have a significant large as well as small sectors.
- 11.4. As its name implies, the function of such an exchange is to put the contractor and the sub-contractor in touch with each other instead of having to spend time and money to locate a suitable party for a specific job. Such exchanges can be run privately on a commercial basis or cooperatively by Industry association or by Government for a nominal fee. In Japan, Sub-contracting plays a very vital role and is encouraged through government agencies; and protected through legislation. In India, a network of 16 Sub-contracting Exchanges have been set-up as part of the Small Industry Development Organisation.
- 11.5. The Sub-contracting Exchanges proposed for Jakarta and Surabaya may be preceded by a pre-operational survey of both the large and small units so that the views of the Industry association and the potential that exists may be determined. Such a survey would also define the reasonable area of coverage of the exchange and the number of clients it can effectively serve. In terms of staff, each exchange will normally have a Technical Manager, Data-Bank Assistants, Technical Assistants (2) and Secretarial Assistance.

11.6. The Sub-contracting Exchange will maintain a data-bank of the recognised capabilities of the units on the small sector. Such information can be stored on punched cards or on a mini-computer as the number becomes larger. The Information is to be kept confidential. A service agreement (draft of which is included in the relevant report) between the Exchange and the client is drawn-up in which the responsibilities of the exchange in respect of transactions effected through it are clearly specified. The Exchange is basically an information centre and cannot be held legally responsible for defects in delivery, delays in payment etc. Where the contractor is interested in a steady supply of goods on specific delivery date, the exchange may monitor the supply, purely as a gesture of goodwill - though there is no legal responsibility to do so.

11.7. It was estimated that the fixed costs of an Exchange will be of the order of Rp.20 Million, while the operating costs may be of the order of Rp.25 Million. It should be possible to meet a portion of the operating costs through subscriptions levied on the client firms - both large and small.

12. Infrastructure for Small Industry

12.1. REPELITA IV the (Fourth Development Plan) has envisaged the establishment of suitable institutes that would provide for the small industry in the country :

- Information Service,
- Education and Training Service,
- Transfer of Technology Service,
- Design and Development Service and,
- Promotional Service.

It was requested that a preliminary scheme be drawn-up for each of these functions so that Government could take a decision on their establishment.

In a Report (No.55 issued in April 1984), it was proposed that the following institutions may be set-up to provide the above services :

- National Information and Documentation Centre (NIDC);
- National Education and Training Centre (NETC);
- National Technology Service Centre (NTSC);
- National Product Development Centre (NPDC);
- National Industrial Service Centre (NISC).

12.2. The National Information and Documentation Centre (NIDC) will perform the following functions :

- Acquisition of Information Material from other departments and agencies;
- Processing and Storage;
- Documentation Service;
- Publication and Reproduction;
- Audio-Visual Service;
- Consultation and Inquiry Service;

In terms of output, the NIDC will bring-out :

- Handbooks;
- Bibliography;
- Current Awareness Bulletins;
- Abstracts;
- Newsletter;
- State of Art Reports;
- Translations;
- Conference and Seminar Proceedings.

The NIDC will operate through six sections as follows :

- Technical Library;
- Documentation and Inquiry Services;

- Data-Bank;
- Publications and A.V. facilities;
- Industrial Dissemination;
- Sub-contracting.

The Centre may be set-up in Jakarta. The initial cost of such a centre is likely to Rp.100 Million; while the operating cost will be Rp.100 Million annually.

12.3. A National Education and Training Centre (NETC) may be set-up with the following objectives :

- To integrate and Coordinate all efforts and activities the Industry Department in the field of human resource development;
- To professionalise the management and operation of the Training and Development activity;
- To strengthen and upgrade capabilities for human resource training and development, and
- To provide facilities for Research and Survey and for the conduct of training programme.

The NETC may undertake the following tasks :

- Planning and Management of all Programmes and Activities;
- Research and Survey;
- Programme Design and Preparation of Training Materials;
- Operating Training Programmes;
- Administration.

The fixed costs are likely to be around Rp.100 Million while the operating costs will annually be of the order of Rp.150 Million.

12.4. The National Technology Service Centre (NTSC) may perform the following functions :

- To assess the existing technological levels in Indonesia in the Small and Cottage Industry with a view to identifying the 'Technology gaps' that need to be filled.
- To compile data on technologies developed in Indonesia and elsewhere relevant to the conditions obtaining in the country.
- To prepare, in consultation with the concerned R & D Institute the necessary engineering design 'drawings' lay-out, machinery, etc. compiled as a 'documentation' that is usable industrially.
- To negotiate for the input of suitable technologies from abroad and to lease them on favourable terms to small and medium units in the country.
- To operate 'Pilot' units to demonstrate the feasibility of such processes.
- To conduct a technical information service that would answer inquiries and encourage dissemination of information within the country.
- To act as a 'bridge' between the R & D Institutions and the field extension agencies.

The NTSC may have the following sections dealing with :

- Technology Assessment and Selection;
- Engineering Services;
- Negotiating and Leasing;
- Technical Information and Referral Service;
- Documentation and Publication.

The NTSC can develop cooperative arrangement with similar bodies in other developing countries and with regional institutions

such as the Regional Centre for Technology Transfer (RCTT) established at Bangalore (India) by ESCAP. The fixed costs of such a centre are likely to be around Rp.50 Million while the operating costs will be of the order of Rp.100 Million per year.

12.5. The National Product Design Centre (NPDC) will deal with :

- Product Development and Design in Metals, Ceramics, Leather, Bamboo, Rattan etc.
- Design of improved tools and techniques as well as better utilisation of locally available raw materials.
- Improved Packaging Techniques for Small Industry Products.
- Training of and Demonstration for craftsman, extension staff and entrepreneurs.
- Publication and Information.
- Engineering Workshop.

Five operational sections are proposed to deal with :

- Product Development and Design.
- Engineering Services.
- Improved Packaging Techniques.
- Training and.
- Workshop to build prototypes of improved tools and equipment.

Fixed costs are likely to be around Rp.150 Million while operating costs may be around Rp.200 Million annually.

12.6. The National Industrial Services Centre (NISCC) may perform following functions :

- Supply of suitable machinery on a hire purchases basis.
- Purchase and distribution of Raw Materials including those that needed to be imported

- Domestic marketing assistance particularly in respect of large volume purchase made by Government and other agencies.
- Export Marketing Assistance including operation as a prime contractor.
- Publications Unit.

The organisation may be structured in five sections to deal with each of these functions. The fixed costs of the centre are likely to be Rp.100 Million while the annual operating costs may be of the order of Rp.100 Million. The NISC can perform very valuable service functions for the growth of small industry in the country.

13. Sectoral Approach to Development

13.1. In an earlier Report (No.3 - July 1982) it has been suggested that the DCSI may be restructured on a 'mixed' basis - part sectoral dealing with specific areas of growth and part functional. In April 1984, a re-organisation of the DCSI was effected on a purely sectoral basis to comprise of the following six directorates:

- Policies and Programmes;
- Food Industry;
- Textiles and Leather;
- Chemicals and Building Materials;
- Handicrafts;
- Metals.

13.2. In a Report (No.58 - May 1984) the significance of this change is discussed and suggests how the two approaches - the sectoral and functional - may be combined judiciously to provide optimal benefit to the development of Small Industry. It was recommended that sub-directorates dealing with Infrastructure, Machinery and Raw Materials, Training and Evaluation, Marketing

and Sub-contracting, be set-up under an appropriate Directorate (for instance Machinery under Metals; Marketing under Handicrafts; Infrastructure under Policies etc) which can act as a nodal agency for that particular function. In addition, it recommended the setting-up of two new directorates - one for Light Industry to dealing with the increasingly important Electrical and Electronics Sectors and another dealing with Economics and Statistics which could be concerned with the compilation of statistical data and coordination of feasibility studies.

- 13.3. The Report also discusses the need to designate the Cottage Industry, the Modern Small Industry and the Services as separate sub-sectors of the Small Industry. In view of the likely rise in the investment ceiling for the Small Industry (upto Rp.150 Million), a separate definition is recommended for the Cottage Industry and Services Sector (Rp.10 Million in investment and employing less than 5 persons). A special package programme of support for these two sectors may be needed to take advantage of their high labour intensity and creation of new employment at minimal cost.
- 13.4. Finally it was suggested that the next phase of the UNIDO Project INS/78/078 may be re-oriented to align with the new approach reflected in the re-organisation of the DGSI so that the integration of the project with the main stream of activities may be closer and more effective.

14. Purchase Reservation Policy

- 14.1. A study currently under progress is the policy regarding the preference accorded to small suppliers/contractors in responding to purchases made by Government agencies. In the earlier decrees, 14 A and 18, it has been stipulated that where contractors are less than Rp.20 Million, the contract should be given to small suppliers belonging to the economically weak groups; where it

is between Rp.10 Million and Rp.50 Million it may be done on a tender basis amongst such parties. Between Rp.50 Million and Rp.100 Million, a price preference may be accorded to the economically weak party upto 10%. The Decree has recently been revised as Decree 29 and 30.

- 14.2. A Study is being made of the operation of the scheme and to see how far the benefits intended to be provided under the decree actually reach the small producer and whether in practice, any price preference is accorded by the purchase agencies. For instance, the Decree makes no distinction between the small producer, and the contractor who is only a middleman. It seems doubtful whether such a benefit should be extended to a middleman and whether it should not be limited to small producers belonging to the economically weak groups.
- 14.3. The need for effective monitoring of the scheme at various levels - Kabupaten, Kanwil and national levels - is also considered essential if it is to really benefit the Small and Cottage Industry. The DCSI and the Kanwil Industry offices need to be involved closely in such monitoring. It should be possible for the market promotion centres (PPP) at the KANWIL level to provide specific guarantees on the ability of a small unit to execute an order and to issue 'Certificates of Competency' to such units to assure potential purchasers. The PPP at the KANWIL office backed by the NSIC at the centre can also provide intelligence to the small units in regard to market possibilities. The study is currently in progress.

15. Sub-Contract Studies

- 15.1. The project originally envisaged an expenditure of US\$200,000 on studies to be sub-contracted; subsequently, it was reduced to US\$100,000. It was agreed in consultation with the Director General Small Industry and the SIDFA, that it would be optimally

more beneficial to utilise it for enhancing local capabilities in conducting relevant studies and that small professional consultancy groups within the country be encouraged to undertake them. About 6 studies were identified as relevant to the small industry in Indonesia; there were :

- Profiles of emerging entrepreneurs in Java;
- Characteristics of Entrepreneurs in the Jakarta Metropolitan region;
- Sub-contracting in the Automotive Sector;
- Industrial Cooperatives;
- Agro-Industrial Processes relevant to Indonesia;
- Appropriate Technology in Indonesia.

Suitable organisations were identified to conduct the studies and recommendations made to UNIDO Head Quarters for awarding them.

15.2. After considerable discussion, it was decided to award two studies to local consultants :

- Sub-contracts in the Automotive section to Sufsi Professional Consultants;
- Industrial Cooperatives to PT Bufar Cemerlang.

The two studies in entrepreneurship were merged and tenders invited for the contract. The replies received were analysed and sent to UNIDO, Vienna. A decision in the matter is waited.

The Study on Sub-contracting in the Automotive Sector was awarded in January 1984 and a final draft of the report was submitted in July 1984 which has been sent to UNIDO Vienna for clearance. The report was preceded by frequent discussions between the study team and the Team Leader. The report has identified 18 product groups which can be produced by 690 Sub-Contract Units.

The Study on Industrial Cooperatives is in progress. About 10 cooperatives have been selected for intensive study on the basis of which the broad conclusions of what makes such cooperatives successful are proposed to be drawn.

16. Short Term Consultants

16.1. The Project had provided for 15 m/m for International Short Term Consultants which was later reduced to 12 m/m. On the basis of 3 m/m for each consultant, it was decided to request four consultants in the following areas :

- Quality Control and Standardisation;
- Credit Policies in the Small Sector;
- Statistical Data Collection and Display;
- Packaging in the Small Sector.

Job-descriptions of the consultants were drawn-up and forwarded to UNIDO Head office in early 1982. The first Short Term Consultant (Mr.B.Gatane - Credit) arrived in April 1983 and was associated till July 1983. The others came sequentially Mr.J.Spijkermann, on Data Collection (July-October 1983), Mr.Guy Chevallier on Packaging (October-January 1984) and Mr.El Morsey on Standardisation and Quality Control (January-March 1984).

16.2. In each case, the Short Term Consultant was briefed intensively by the Team Leader and assisted to draw-up a Work Programme in consultation with a designated official from the DCSI. The Consultant was also assisted in making field visits to relevant places and to meet the concerned Institutions and Individuals. At the conclusion of the mission, a meeting was organised by the DCSI enable the consultant to make a presentation of his recommendations which were discussed by a widely representative gathering. In the case of the Packaging Expert, the meeting

was organised in cooperation with the Indonesian Chamber of Commerce and Industry (KADIN). The recommendations made by each consultant were embodied in a Terminal Report prepared by each consultant.

17. Training and Study Tour Fellowships

17.1. The Project had originally funds for fellowships and Study Tours at US\$30,000 each which was later enhanced to US\$60,000. In consultation with the Training Expert, the subjects for fellowship and the institutions suitable for the purpose were identified; these included Information Management, Training Methods, Low Cost Automation, Industrial Estates, Export Marketing, Small Industry Promotion etc. The Institutions included the Small Industry Extension Training Institute (SIET) at Hyderabad, the Institute of Small Scale Industries (ISSI-UP) at Manila, the Institute of Tool Design at Hyderabad, the Irish Development Authority at Dublin, Carl Duisberg in Germany and the Japan Overseas Training Programme. The duration of the programme ranged from 6 to 12 weeks. In each case, the fellow was briefed prior to his visit and later debriefed.

17.2. Study Tours were also organised for middle level and senior officials of the DG-SI. Such tours were undertaken to Japan, South Korea, Philippines, Italy, Belgium, France, and were concerned with noting the policies and programmes for the development of Small Industry in those countries.

18. Other items of work

18.1. A number of occasional papers, were prepared (see Annexure 1) in response to specific requests from officials of the DG-SI. These related to policies followed in other countries as well as on topics relevant to Indonesian Small Industry. These notes were on topics such as the utilisation of Industrial

Estates, the working of the Foster Father Scheme, the implementation the Product Reservation Scheme, the preparation of the Action Plans etc. Through those notes, our experience in the field of development of Small Industry was shared with the concerned officials of the DGSI.

18.2. The purchase of equipment - particularly vehicles also formed an important activity. It was early realised that without the facility of transport it would be extremely difficult for them to function effectively; hence, the proposal to purchase one vehicles for each field team was placed before the First Tripartite Review in September 1982. After it had approved, the vehicles were purchased - three in 1983 and one in 1984. One vehicle was obtained on loan from the UNDP. A photocopier was also purchased for use in the Information Centre at Jakarta. A few other office equipment were purchased at Jakarta for use by the Project Team.

19. Training of Counterpart Personnel

19.1. All studies and visits made were done along with the counterparts provided by Government. In addition, discussions were held with officials of the DGSI and a few talks delivered on various aspects of Small Industry development. Thus a degree of training 'on the job' was imparted to the national officials belonging to the DGSI.

20. Utilisation of Results

20.1. The area allotted to me relates to Policies and Programmes and the main effort has been to review the implementation of the policies already laid down to see how far they can be made more effective. There has been a major shift in the awareness of the DGSI on the importance of modern small industry for growth and employment and this can be partly attributed to the work

of the project (and particularly of the Policy Advisor) who has consistently emphasised the immense potential of the modern Small Industry. The report on relating to Small Industry in the Fourth Five Year Plan document bears eloquent testimony to the recognition at the highest levels of the contribution the modern sector can make both to increase production and to create new employment opportunities. Though intangible, this may be regarded as a major achievement of the work of the Policy Advisor.

20.2. However, the importance of the traditional sector, in terms of the large numbers of people employed and the skills it embodies, cannot be underestimated. For this reason, it has been constantly pointed out that a separate package of assistance may be formulated for the traditional sector - usually a cottage industry - and that it be distinguished from the modern small sector. This becomes even more important when, for other reasons, the ceiling on capital investment is sought to be increased. Although so far, no specific categorisation of the Cottage Industry has been made from the modern small sector, it is considered that the need for such a distinction has been recognised.

20.3. Another intangible but none the less significant achievement of the Project Advisor is the point that smallness in scale need not always be considered as being low in technology. In fact, in some areas as Electronics, many activities involving high technology, need only limited capital investment and can hence be undertaken on a small scale. Increasingly, it is such areas that are providing exciting challenges to young technologists who see in it an alternative career path to seeking employment either under government or in the large companies. For this reason, a change was made at the instance of the Team Leader, of the job-description of the Industrial Engineer at Bandung which concentrated on the fields of Electrical,

Electronics and Instrumentation. This sectoral approach to development of Small Industry has produced a successful result in generating an intense interest in this area of high potential and creating an awareness of the possible role of the small sector in this field.

- 20.4. In fact, the adoption of a sectoral approach to development has been advocated right from the commencement of the Project and the fact that in 1984 a major re-organisation of the DGSI has been undertaken on a sectoral basis is significant. It has been felt that as Small Industry develops, it may no longer be adequate to speak merely in functional terms and the special problems of the Small Units in a particular sector whether it is metals, leather, chemicals or electronics - need to be looked upon on an integrated basis. In Training for instance, the emphasis shifts from a purely motivational training to product oriented training programmes; in marketing, the general problems of marketing are no longer of interest and it is the special problems relating to a particular product that can produce results. Now that DGSI has been re-oriented on a sectoral basis, it may be expected that policies would be more product specific and not merely in generalised terms.
- 20.5. In Sub-contracting, the Draft Model Agreement between the 'parent' unit and the Small Units has been well received by both the large and small sectors. Not only was the need for such a clear agreement recognised by the details of such an agreement have also been approved by both the large and small sector. It is felt that a wider adoption of the agreement would give a clear picture of the obligations on both sides - which would help in a better appreciation of the benefits that would mutually accrue through such an arrangement. To facilitate a greater measure of sub-contracting, a specific proposal to establish two Sub-contracting Exchanges at Jakarta and Surabaya has been made and it is hoped that an early decision is taken to set them up to encourage the process of Sub-contracting.

- 20.6. The mechanism of 'Action Plans' to monitor the progress of planning at the KANSIL (provincial) and Kabupaten (District) levels has been described in a report. This mechanism has been accepted, in principle, and it has been recommended to be adopted by the provincial and district industry offices. The emphasis in the Action-Plan is to look upon Small Industry Development as an integrated process involving the total mobilisation of all the resources, both human and material, in the region. In this connection, the identification of new industrial opportunities, which was undertaken by other members of the team, has been a great help; since it is through such opportunities leading to the creation of new units that the targets set in the national plan and broken into provincial and district level targets can be fully met.
- 20.7. The over-view study on the small industry extension centres (PPIK) - based on five individual studies - has provided the DGSI with an objective analysis of the performance of these centres and how they can be made more effective. While some of the simple recommendations at the operating level have been accepted, those made at a policy level are under consideration. However, the ideas presented in the report have been appreciated and it may be anticipated that at least some of them will be adopted.
- 20.8. The concept of a 'Basic Law' for Small Industry for which a draft has been provided has also been well received; now that a comprehensive Law on Industrial Development has been passed, the time seems ripe for a Basic Law or Decree on Small Industry Development which would clarify the role of the sector and Government's attitude to it. Such a Basic Law would set forth clearly the degree of protection that can be provided to the sector through such measures as Product Reservation and Purchase Preference and the need for the sector to upgrade its quality.

20.9. The Product Reservation Scheme has been studied in detail and recommendations have been made on how to monitor it effectively, and the criteria to be adopted for reservation. It was noted that there has been inadequate awareness of the potential of the scheme which can only be realised if it is backed by a 'Package of Assistance' for units making the reserved products. An illustrative list of 100 items that are eligible for reservation has also been drawn-up. The Study on the Scheme as also on the Purchase Preference Scheme highlights the importance of close monitoring that needs to be done if such measures are to yield the benefits intended.

20.10. Ultimately, there is need for a well coordinated institutional infrastructure if small industry is to grow rapidly in the country. The Fourth Five Year Plan has indicated five national centres dealing with Information and Documentation, Education and Training, Transfer of Technology, Product Design and Development, Industrial Services. Proposals have been formulated indicating the functions, organisation and costs of each of the centres which, it is hoped, would be helpful in arriving at a firm decision on the establishment of these centres, which in turn, would give the small entrepreneurs meaningful institutional support.

20.11. It is seen from the above that the various points of view expressed and recommendations made in the Reports have been appreciated and adopted in some case; in others, it some time before their impact is felt but they have helped in creating a new awareness of the potential the small industry sector has in contributing to the industrial growth of the country.

21. Recommendations

21.1. The recommendations as to future policy measures have been made in several reports and indicated in the earlier pages.

Broadly, it is considered that the policy frame already formulated is an adequate one but needs to be more effectively implemented and closely monitored. There does not seem to be any need for a drastic re-orientation of the programme.

21.2. However a few specific recommendations have been made such as the following :

- (i) A Basic Law for Small Industry Development needs to be formulated to set forth clearly the objectives of the Development Programme and how it is sought to be achieved. The Basic Law may indicate clearly the 'Package Assistance' to be provided by Government and what needs to be done by the units themselves.
- (ii) Better linkage, with the large industry needs to be effected through creation of greater awareness of the mutual benefits of such a linkage; it may also be regulated through an agreement which is monitored by the KANWIL office. The establishment of sub contracting exchanges would also be helpful in this regard.
- (iii) Planned targets at the National Level need to be broken up into provincial and district levels on the basis of which 'Action Plans' may be formulated for implementation. Such plans should mobilise the total resources of the region - both material and human for its economic development.
- (iv) Institutional Infrastructure needs to be built up at national level in the areas indicated in REPELITA IV (Fourth Development Plan). Such Institutions will be apex bodies providing guidance at the provincial and district levels.
- (v) The Industrial Extension network needs to be strengthened

through a higher performance calibre of the personnel which can be achieved by suitable training programmes which are product specific rather than general motivational programmes. The net work has to gear itself more closely to the needs of the entrepreneurs who must be the 'primary focus' of the work of the Extension Agency.

- (vi) The sectoral approach followed in West Java may be expanded so that the successor project can be more closely geared to the directorates within the DG-SI. Such a linkage would lead to more effective utilisation of the international assistance offered through the project.

- (vii) The DG-SI has to play a central coordinating role with several government departments, agencies, financial institutions and industry associations to ensure that the small industry sector is given the degree of support necessary for its growth and development.

22. Conclusion

In conclusion, it may be stated that the work done during the last three years and the various ideas generated in the Reports prepared on a variety of topics will take some time to bear fruit; it is hoped that it has contributed in a small measure, to the better implementation of the policies laid down for Small Industry Development in the country.

Annexure

List of Reports and Occasional Papers prepared by Policy Advisor

Reports

- | | | | |
|-----|---|----------|------|
| 1. | Note on the Project Document relating to Assistance to the Development of Small Industry in Indonesia | November | 1981 |
| 2. | Handbook for the Project Personnel | December | 1981 |
| 3. | Interim Report on the Development of Small Industry in Indonesia | July | 1982 |
| 4. | A Note on the Project for Discussion at the First Tripartite Meeting | July | 1982 |
| 5. | Foster-Father Programme in Indonesia - A Study | January | 1983 |
| 6. | Need for a Basic Law for Small Industry Development in Indonesia | March | 1983 |
| 7. | Proposal for Award of Sub-contract for six studies | May | 1983 |
| 8. | Manual for a Training Programme on Formulation of SIDAP (Small Industry Development Action Plans) | June | 1983 |
| 9. | A Note on the UNIDO Project INS/78/078 for the Second Tripartite Meeting | November | 1983 |
| 10. | Product Reservation Scheme in Indonesia - A Study | December | 1983 |
| 11. | Small Industry Extension Centres (PPIK) in Indonesia - A Study - | January | 1984 |
| 12. | Report at the Meeting of the Project Team (February 27th - 29th, 1984) | March | 1984 |
| 13. | Sub-Contract Exchanges in Indonesia - A Project | March | 1984 |
| 14. | Institutional Infrastructure for Small Industry Development | April | 1984 |

- | | | |
|--|---------|------|
| 1. Sectoral Approach to the Development of Small Industry in Indonesia | May | 1984 |
| 16. Report on the Meeting of the Project Team (June 4th - 5th, 1984) | June | 1984 |
| 17. Draft Terminal Report on the Project INS/78/078 | July | 1984 |
| 18. A Proposal for Four Project for Development of Small Industry in REPELITA IV | October | 1984 |

Occasional Papers

- | | | |
|---|-----------|------|
| 1. Role of Cottage Industries in the Export of Developing Country | December | 1981 |
| 2. Work Plan for 1982 | December | 1981 |
| 3. Some important issues in the Development of Small Industry in Indonesia | December | 1981 |
| 4. A Note on the Assistance Programme in the field of Small Industry Development in Indonesia | December | 1981 |
| 5. A Note on the Optimisation of Economic Growth | December | 1981 |
| 6. A Strategy for the Development of Small Industry in Indonesia | March | 1982 |
| 7. A Note on the Evaluation of the Mini-Industrial Estates | August | 1982 |
| 8. Methodology for Identification of New Industrial Opportunities | September | 1982 |
| 9. Methodology for Study of the Product Reservation Scheme | September | 1982 |
| 10. Questionnaire on the Foster-Father Programme | September | 1982 |
| 11. Steps to be taken to improve the operational efficiency of LIK at Semarang | November | 1982 |

12. A Note on the Preparation of an Action Plan for the Region by the Field Teams November 1982
13. A Note on the Purchase Reservation Scheme December 1982
14. A Note on the Monitoring and Evaluation of the Performance of the Regional BIPIK Office January 1983
15. A Note on the Training Programme for the UNIDO Project January 1983
16. Strategies for Small Industry Development in Japan, China and India February 1983
17. A Note on the Action Programme for Small Industry Development in REPELITA IV April 1983
18. Financial Support Systems in Japan, India and Philippines April 1983
19. A Note on the Definition of Cottage, Small and Medium Industries July 1983
20. Project INS/78/078 for Development of Small Industry in REPELITA IV July 1983
21. Development of Small Industry through Sectoral Priorities October 1983
22. A Note on the Project for Assistance to the Development of Small Industry in Indonesia December 1983
23. A Note on the Project INS/78/078 (for Evaluation purpose) January 1984
24. A Note on the Second Phase of the UNIDO Project (INS/78/078) February 1984
25. A Note on the Development of Small Industry in Non-Metropolitan Areas in Indonesia August 1984

