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ASSISTANCE IN DEVELOPMENT OF BUILDING MATERIALS

FOR LOW-COST HOUSING

DP/INS/81/006

INDONESIA

Report of the Evaluation Mission*

H. Heep

United Nations Industrial Development Organization

Vienna

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INTRODUCTION

The project was conceived to support efforts in the public sector to increase the number of dwelling units for low income people. The overall National backlog was estimated at 1.5 million units, and the need for new housing supply was estimated at 1.5 million houses per year. The ability of the private sector to be fully responsive in the construction of low cost houses, especially mass housing schemes, was considered limited in spite of the enormous social need. It was detected that the supply of local low-cost building materials and equipment of appropriate quality, quantity and price at the right location and in time were major bottlenecks. Hence it was thought that for mass housing programmes to meet tight delivery times advance inventorization of the materials and equipment needs and an effective and efficient promotion coupled with technical and technology assistance, would significantly ameliorate the existing situation. It was also felt that these actions would lay a foundation for a sustained industrialization of low-cost building materials and equipment-manufacturing industry. In this respect it was sought to mobilize and enhance the substantive productive potential of the small building materials industries to supply materials for low cost housing projects.

For undertaking this task the Government of Indonesia requested the cooperation of UNDP and UNIDO, as the executing agency, to provide technical assistance. The Project Document INS/81/006 "Assistance in the Development of Building Materials and Supplies Industry for Low Cost Housing" was co-signed on September 1982, for a total UNDP contribution of US\$ 2,700.000 and Government support equivalent to US\$ 3,641.000. Project field activity began at the end of June 1983 upon the arrival of the International Advisor and the assignment of a National Project Manager.

A tripartite Review Meeting took place on 21 November 1984 to discuss progress of project activities. On that occasion it was recognised that the project document objectives and outputs covered a diffuse range of different activities and that there was a need to clarify and concretize the project scope and consequently to elaborate a precise workplan. Not able to resolve these issues this meeting decided that an in-depth evaluation should take place within six months of the meeting. The Terms of Reference prepared for the Evaluation Mission are given in Annex I.

The mission was formed with H. Latorre, UNDP representative and Team Leader, H. Heep, UNIDO representative, and Mr. A. Hariman, Senior Advisor, Ministry of Housing, representative of the Government of Indonesia. The mission carried out the evaluation from the 23 September until 3 October 1985. During this period the mission held meetings with a large number of Government officials involved in project activities, as well as with the UNDP Resident Representative and UNIDO Senior Industrial Advisor. The mission visited the regional office of the project in Surabaya, and small industry sites in Solo, Pakis and Turen where provincial, district and local officials and production cooperative members were met. All UNIDO experts in Jakarta and Surabaya were interviewed as well as the Chief Technical Advisor and National Project Director. A detailed list of the persons met and institutions contacted is attached as Annex II.

ABBREVIATIONS USED

AIRD	Agency for Industrial Research and Development, Ministry of Industry
BA?PENAS	National Development Planning Board
BIPIK	Project for extension services for development of small-scale industry within the Ministry of Industry
BKPM	Capital Investment Coordinating Board
BKPN	National Housing Policy Board (same as NHPB)
BPPI	Agency for Research and Development of Industry within Ministry of Industry
BRI	see DPMB
BTN	National Savings Bank providing mortgage particularly for low cost housing built through PERUMNAS and member of Indonesian Society of Real Estate Developers.
CIPTA KARYA	Directorate General of Housing, Building, Planning and Urban Development within Ministry of Public Works.
CPOT	Central Planning and Operational Team of INS/81/006 in Jakarta
CRDI	Ceramic Research and Development Institute for Industry, under the Agency for Research and Development for Industry, Ministry of Industry
D.G.	Directorate General of a ministry
DPMB	Building Research Institute (BRI), also known as the Institute for Research and Development Of Human Settlements, Bandung. Formerly this Unit within Directorate General of Cipta Karya, Ministry of Public Works and is now with Agency for Research and Development within Ministry of Public Works. The Institute for Research and Development is also an ESCAP Regional Centre for research and development of human settlements.
JPC	Joint Permanent Committee on Building Material and Building Construction Industry related to low-cost housing. Jointly with Ministry of Industry and Ministry of Public Works. Chaired in rotation by the Secretary Generals of both Ministries. The Secretary of the Committee also rotate and are the chairman of the R & D Agencies of the respective Ministries

KAFUPATEN	District
KANDEP Per-industrian	Extension office of Ministry of Industry at District Level
KANWIL Perindustrian	Extension office of Ministry of Industry at Provincial Level
KIP	Kampung Improvement Programme - Programme for villages within town boundaries
KIID	Village Cooperative
NHPB	National Housing Policy Board (same as BKPN)
Ministry of Transmigration	Responsible for Indonesian massive resettlement scheme
P.T. PAPAN	Semi-Private Mortgage Institution for Higher Income Groups
PERRINIKON	Project for Development of National Construction Industry within the Ministry of Public Works
PERINTIS	Stimulus Housing Programme
PERUMNAS	National Urban Development Corporation - responsible for construction mass public housing
POST	Planning and Operational Team on Site of INS/81/006 (District Level)
REI	Real Estate Indonesia - Association of Private Developers
REPELITA	Indonesian Five Year Development Plan
RHIP	Rural Housing Improvement Programme
RPOT	Regional Planning and Operational Team of INS/81/006 - Provincial Level
RSC	Regional Steering Committee of INS/81/006
SC	National Steering Committee of INS/81/006

PART I

CHAPTER I - FORMULATION OF THE PROJECT

A. SOCIO-ECONOMIC PERSPECTIVE

Indonesia's population is currently estimated at 162.8 million (mid-year 1985). The absolute number of citizen is steadily rising and is bound to pass the 200 million mark before the end of the century, annual growth rates are expected to gradually decline in future as fertility rates come down in response to the spread of family planning, income growth and increased education.

Urbanization is increasing dramatically in Indonesia, progressing at an annual rate of 4%. 40 million new urban residents are expected within the last two decades of this century, and the population of Jakarta will be more than double before the year 2000. The growth of urban population was particularly rapid in Kalimantan (6.4%), Sumatra (5.1%), Sulawesi (5.1%) and apparently modest in Java (3.0%).

Housing investment in Indonesia is at the lower level of 3% of GDP as compared to the desired level of 5% of GDP. This is partially due to lack of access to long-term credit for housing and to legal issues relating to land titles and collateral. Approximately over 90% of housing in Indonesia has been privately constructed, often by the owner-occupant, without access to the formal banking system.

The public sector is playing an increasingly important role in both financing and constructing houses. Among formal housing programmes, the National Urban Development Corporation (PERUMNAS) was established in 1974 and has increased its output from approximately 70,000 units in REPELITA II (1974-1979) to an estimated 90,000 units in REPELITA III (1979-1984). Most of these PERUMNAS housing projects include serviced sites with core units, at an affordable price to all except the poorest 20% of households.

In addition to financing the PERUMNAS programme, the Government has since 1978 provided mortgage financing through the Bank Tabungan Negara (BTN) for units built by private developers. As of September 1983, BTN had financed more than 90,000 privately constructed units (Rp 403 billion) in addition to 82,380 PERUMNAS units (Rp 120 billion). Other institutional source of housing finance is a recently established semi-private mortgage institution, P.T. Papan Sejahtera, for higher income groups. Apart from BTN and P.T. Papan, there are no other mortgage lending institution in Indonesia.

Recognizing that a massive expansion of the above Housing programmes was desirable, the government established the "PERINTIS" (or stimulus) programme early in REPELITA III (1979-1984), which provided financial assistance through Cipta Karva's development budget and implemented by its staff. The Government also subsidizes an association organized by private developers, REI (Real Estate Indonesia).

For improving living conditions including housing, in urban village areas, the Kampung Improvement Programme (KIP) was launched in 1969 initially in Jakarta and spread over other urban cities.

During the current REPELITA IV (1984-1989), the demand in the field of low-cost housing and human settlements is as follows:

- (a) developments of housing projects in urban areas which are carried out by PERUMNAS 140,000 units and consist of core houses, one-family houses and multi-storey flats.
- (b) real estate development with financing provided by the State Savings Bank (BTN) of approximately 160,000 units.
- (c) Kampung (Neighbourhood) Improvement Programmes in various cities, estimated to cover between 10,000 and 15,000 hectares, and Rural Housing Improvement Programmes in approximately 10,000 locations scattered across the whole country, as well as special projects for health centres, schools, etc.
- (d) Transmigration Programmes which involve resettlement of approximately 750,000 families.
- (e) development of housing through private construction of about 1 million units.

The majority of the building material industry is small-scale and weak in technology, equipment and machinery, quality and delivery of products, competitiveness and interlink with capital market. Their building material standards are not in harmony with standards codes and building regulations, vice versa. The construction industry is also weak in capital, technology, techniques and manpower development.

The institutions of the formal housing programmes mentioned above have a limited capacity to expand its output in order to meet the need of low-income groups.

The national capabilities for housing development is composed of several technical departments of several ministries and special agencies as well as the active participation of the private sector. Improved interlinkages and coordination amongst the actors involved in the housing sector is needed to accelerate development. The major supporting factors are capital, housing and property loans, marketing, technology, training and implementation mechanisms.

B. OBJECTIVES

The intention of the development objectives of the project, as they appear in the project document, was to meet the most important requirements for the fulfilment of the national targets set up in the national development plans. To eliminate existing constraints by establishing a well planned, coordinated and interlinked programmes amongst the building material and equipment industry and the construction industry.

The objectives of the project are 1) "to assist the government in the departmental activities for promoting the production of building materials and equipment, and the construction industry" ... 2) "to assist the implementation of coordinated planningin order to coupleministerial.... programmes of construction and development with promotion of improved production of domestic ... building materials and equipment ..."
3) to promote "a capacity to produce machinery and equipment to support the development of various sectors...".

C. PROJECT APPROACH

In the project document it is further specified that the immediate project objective is "to achieve a near complete supply of building materials and equipment from local sources for the government's low cost housing transmigration housing, school and hospital building's construction programmes during the REPELITA III and IV period". Presumably because of the long gestation period for the achievement of this objective other complementary immediate objectives are specified:

1. "establishment of an operational roving planning team at the Government Agencies involved. The duties of the team are:
 - 1.1 "to deal with the system of coordination planning and implementation of low cost housing" and other construction projects;
 - 1.2 to assess "the time and location requirements of building materials, supplies and equipment for construction programmes";
 - 1.3 "to prepare an implementation programme for ensuring adequate and timely supplies at desired locations";
2. "operation of up to three regional planning teams to implement" the duties indicated above in region concerned;
3. "operation of up to five model programmes for the implementation of ... construction projects...";
4. "identification...of opportunities to mobilize...national expertise..." existing in the National Research and Development Insitutes" for the implementation of the above";
5. "identification and implementation of new business opportunities for production and supply of required materials and equipment...".

The project was supposed to be implemented in two phases, one of 6 to 9 months duration and the other of 39 to 42 months duration, after pre-requisites for project implementation have been met. The pre-requisites agreed upon were the following for the Government:

- "issue necessary administrative order/decrees for the establishment of the Central Operations Unit/Team, the Regional Operations Units/Teams, the Supervisory Project Management and/or Advisory Committees
- The Ministries of Industry and Public Works will take all administrative and budgetary steps to ensure that sufficient and qualified personnel, equipment and physical facilities are made available to start project activities
- all information required by the project will be provided and the required administrative instructions issued
- suitable administrative steps will be taken to ensure an effective collaboration within and amongst various government organizations

For UNIDO they were the following:

- make available all previous reports on UNIDO/UNDP assistance to Indonesia in the field of building materials development
- provide suitable qualified and experienced experts on a timely basis
- timely arrangements for obtaining local and international sub-contracts, consultancy or equipments

A tentative workplan was included in the project document as a reference. A detailed workplan was supposed to be prepared by project personnel during the project first phase, before the project second phase started, and the regional offices were organized.

The Government contribution in kind was estimated to be US\$3,641,168 to cover the cost of 40 national project staff, and steering committee staff (US\$ 848,568), 38 support personnel (US\$ 190,000), administrative and financial support service (US\$ 17,600), travel (US\$ 193,500), equipment and material (US\$ 2,322,000), and miscellaneous (US\$ 69,500). UNDP/UNIDO contribution in the amount of US\$ 2,700,000 was to cover the cost of 6 international professionals (US\$ 1,428,300) and 8 months for consultants (US\$ 62,800), national experts (US\$ 202,000), sub-contracts (US\$ 150,000), and training (US\$ 183,000).

PART II

CHAPTER II - ANALYSIS OF PROJECT DESIGN

A. OBJECTIVES AND FUNCTION

DEVELOPMENT OBJECTIVE: The development objective of the project in the approved project document is as follows:

"The project's development objective is to assist in the realization of the above* targets by establishing a system of coordination of the multi/sectoral/departmental activities for promoting the production of building materials and equipment, and the construction industry". The project will address itself to Government activities as well as to private sector activities.

There is a great deal of narrative in the Development Objective section which properly belongs in the Background and Justification section of the project. The above although containing elements of a Development Objective also includes a Project Objective related statement i.e. establish a system of coordination. The narrative explains who will be coordinated in this system, and also contains a reference to the coordination of planning, which presumably means that the system of coordination will include planning. This wasn't specified in the core Development Objective statement which only makes a vague reference to a system of coordination without specifying what it entails.

The entities to be co-ordinated are also mentioned and include the Ministry of Public Works, Ministry of Manpower and Transmigration, Ministry of Health and Ministry of Education and Culture. Remarkably the Ministry of Cooperative (now Ministry of Cooperative) and Associate Ministry of Housing (now Ministry of Housing) and the Ministry of Industry were not included. Several other Ministries active in the Housing sector should have also been included.

In any case this level of specification should have been in the Project Output statement where the beneficiaries and decision-makers of the coordination system would normally be defined. In summary the project is given a mandate although vague to develop a coordination system for the housing sector.

*Refer to REPELITA IV targets outlined in the Socio-Economic Perspective. PART I, Chapter I., A. of this report.

IMMEDIATE OBJECTIVE (PROJECT OBJECTIVE)

This section should specify what will be achieved at the end of the project. In fact the statement is a continuation of the Development Objective text which continues on to add a new dimension to the project by saying that a near complete supply of building materials and equipment from local sources for the "captive" public housing market will be developed. No mention of the private sector is made although it is clearly included in the Development Objective statement.

The above statement represents an achievement indicator of project status at the end of project operations.

The project objective statement continues to say that the project will establish:

- i. an operational/roving planning team to deal with the system of coordination planning of Government's public sector housing construction programmes and related programmes;
- ii. operation of up to three regional operation/planning team (RPOT);
- iii. operation of up to (5) model programmes for the implementation of selected PERUMNAS and transmigration, etc. construction projects for demonstration.

These are institution building outputs. The achievement of which would contribute towards the realization of project objective which regrettably has not been clearly formulated in this document.

The project objective section includes a statement of what the project will do once an institutional capacity has been established, namely to identify and implement "opportunities for support by the National Research and Development Institutes". The next statement is similar "identification and implementation of new business opportunities for production and supply of required materials and equipment". The institutional capability and capacities have not been specified at all.

Accepted project design logic requires that the development objective should make a statement of what "end" or particular development objective in the national plan and/or country programme the project intends to contribute toward in a significant way. A development hypothesis is set up which says: if the Project Objective is achieved, then the Development Objective is achieved if all parallel actions outside of the project scope are also successfully carried out. The question is then how or by what means will the project objective significantly contribute towards the achievement of the development objective. Moreover the question as to what problem(s) the project will address should be clear. None of these conditions have been met.

In summary the Development Objective and Project Objective represent a vague, confused set of statements containing elements of project background and justification, activities achievement indicators, and objectives at the wrong level. Reading them confuses the readers and leaves the project open to interpretation and leaves the project susceptible to severe implementation problems since the concept, approach and most importantly the project objective is unclear.

OUTPUTS

The outputs of the project should be packaged in terms of capabilities/capacities which were not there before or are now available in greater quantity, higher quality and sophistication. The actual services that are to be provided by the organization being established or strengthened are achievement indicators.

The outputs should then be fully specified in functional or service categories. For example:

The project's involvement in coordinating should be specified and include information on what coordination activities will be performed, by whom, to what extent, how much and for whom.

The project document does not specify what services are to be provided to the housing sector, to whom, how much per year, and at what level - the key to the total project logic is missing. Findings discussed elsewhere in this report will confirm this.

This vagueness has resulted in the absence of lasting and effective Government staff involvement and lack of clarity what the CPOT is expected to do. Institution building within the Government structure is very limited. Often the project is requesting services instead of providing them. Efforts are required to stimulate the ability of the Housing Sector to solve low-cost housing needs need to be built into the national structures.

Problematic project document design has resulted in the establishment of a capability internal to the project. This capability will disappear upon termination of the project.

FUNCTION

By analyzing the project document, researching the file material and through discussions with parties having differing degrees of involvement or knowledge of the project it appears that the project's primary function is not Direct Support as stated but Institution Building. The secondary function is Pilot cum Direct Support and not Institution Building.

Institution Building implies that capabilities will be established and strengthened during the project's lifetime. The actual ability to prepare studies design and install systems and provide services to the housing sector through by the institutions/and or functional units created or strengthened by the project should have been specified in the document output section.

The Project Objective would then read:

The establishment or strengthening of XYZ ministry(ies), division(s)/department(s) ... to provide the following services ... (identify the main type of services to be given for example, co-ordination), to ... (identify user/beneficiaries).

A clear statement such as this would have helped to prevent the setting up of a floating Central Project Office Team (CPOT) not substantially involved with important housing sector activities carried out by of the various Ministries who in theory are to benefit from the project.

In summary it is unfortunate that key parameters of the project such as the objective, outputs and activities were rather unspecific. This has reduced the value of the document for a common understanding by all parties involved during the implementation of their respective roles. In the efforts to monitor and measure the achievement, as well as for a clear specific description of the tasks of the international experts, the design was inadequate. The job description did not improve the situation. During several of the interviews with Government staff, it became clear that the project concept was not well understood, nor was there an identification with the project. This is required if it is to succeed.

B. MEANS-END ANALYSIS

The state of the present document makes it impossible to undertake a means-end analysis.

The relation between inputs and proposed outputs are rather stretched so as to make the provision of meaningful analysis difficult indeed. What follows are some issues concerning the means given to the project to achieve uncertain ends.

Project Scope

The design of the project called for the project to work at two levels simultaneously at the Macro-level to set up and implement a planning and coordination system for the Housing Sector and at the other end of the spectrum to carry out five "model" construction programmes for demonstration purposes.

These widely different mandates require totally different approaches, methodologies, advisory skills and institutional settings. Moreover the macro level mandate is clearly a government responsibility. However a highly skilled industrial planner within the framework of a technical cooperation project could provide advice on how to set up an improved planning coordination system adopted to local conditions.

The skill specification and actual composition of the project team fielded by UNIDO was not responsive to the particular requirements needed for the realization of this objective. This will be further discussed in the Chapter on project results.

The ability of the project team to effectively address the macro-level mandate has also hindered by the location of the project in the Ministry of Industry, under the Agency for Research and Development Industry, instead of the Ministry of Housing. The Ministry of Housing is responsible for coordinating the housing sector.

This issue of institutional framework, planned versus actual, is discussed in detail in Chapter III - Institutional Framework - Analysis.

For reasons outlined above the project team has focussed its attention on the realization of micro-level objectives.

BUDGET-INPUTS

Vague project design has allowed the project budget to generously allocate US\$ 490,000 for non-expendable equipment. The purpose for which has not been justified in the project document and which allocations are not adequately linked to the planned activities of the project. The result is that CRDI in Bandung is receiving a windfall of equipment related to the upgrading of CRDI equipment park in the amount of US\$ 150,000. This amount is not adequately linked to the approved project design. It is an open question whether CRDI should receive any equipment at all in view of the massive equipment inputs provided under another project to strengthen CRDI. The \$ 150,000 allocation appears to be arbitrary and needs to be reassessed.

A similar situation can be found with the US\$ 183,000 training component. How this amount was arrive at is unknown.

In effect UNIDO and UNDP have given a blank check to the Indonesian Government with respect to a substantial part of the inputs.

CHAPTER III INSTITUTIONAL FRAMEWORK

The project document section on the "Framework for Effective Participation of National and International Staff in the Project" and the section detailing the "Institutional Framework" are contradictory. The problem is that the former section speaks about a project institutional framework which didn't reflect existing structure. The latter section is more accurate. The Associate Ministry of Housing attached to the Ministry of Industry had already been upgraded to a higher level and separate State (coordinating) Ministry of Housing, during 1978. The set up detailed in the "Framework" section was therefore an anachronism when project was approved.

The intention of the project drafters is however clear, the Ministry of Housing was to provide the overall direction to the project by appointing one of the Minister's senior staff as National Project Director. This was to ensure interdepartmental participation. Moreover, the spirit of the coordination required was embodied in the statement that the "Joint Permanent Committee" in the field of building materials and infrastructure for the construction industry established by a letter of decision No. 233/M/SK/6/1980 of the Ministry of Industry and Public Works will act as a supervisory project management committee.

In the Institutional Framework section it is mentioned that a National Housing Policy Authority, to formulate policies and programmes to coordinate the housing development programmes carried out by the various Governmental Institutions and enterprises, was established during 1974.

Members include:

- The Minister of Public Works as Chairman
- The Minister of Social Affairs as Vice Chairman
- The Minister of Home Affairs
- The Minister of Finance
- The Minister of Administrative Development
- The Minister of Industry
- The Minister of Manpower and Transmigration
- The Minister of Trade and Co-operatives
- The Minister of Health and
- The Director of Indonesian Central Bank

The Director General for Housing Building, Regional Planning and Urban Development (CIPTA KARYA) Ministry of Public Works was designated as Executive Director of the authority.

The State Minister of Housing is assigned the role of strengthening the coordination, integration and synchronization of various governmental institutions involved in housing development. Additionally the State Ministry of Housing's functions include the coordination of the formulation of material housing policies and programmes and their implementation. The scope of this coordination also covers various supporting factors for housing development such as land, finance, industries, social infrastructure and community development.

Finally, the national housing policies formulated by the national Housing Policy Authority, are based, on the subject matters provided by the Minister of Housing to the authority for its consideration.

In the formulation of the operational policies and guidelines the Minister of Housing co-operates with the Directorate of Housing, Building, Planning and Urban Development; the Ministry of Public Works, and on behalf of the Minister of Public Works the Ministry of Housing supervises the National Urban Development Corporation (PERUMNAS).

Clearly, since the project was planned to become very much involved in some form or another in most the activities mentioned above the project's Jakarta CPOT team leadership should have been integrated into the Ministry of Housing structure to enable it to strengthen its institutional capability/capacity to carry out this work. The National Project Director should have been appointed from this Ministry for the same reason. The actual National project Director is on part-time secondment from the CRDI where he is the Director.

The Institutional Framework section continues to explain how the Directorate General of Housing, Building, Planning and Urban Development, under the Minister of Public Works is responsible for supporting the implementation of housing programmes, and the production of housing development such as:

- To study various aspects for the formulation of housing policies and programmes;
- Training and dissemination of information services;
- Preparation of housing standards and technology systems;
- Management of Kampung Improvement Programmes and Rural Housing Improvement;
- Other efforts which are conducive to housing development.

Here again the project was expected to interface with the Ministry of Public Works to support and develop these activities. The most effective way to do this is to integrate those experts dealing with public works housing mandates into the existing structure of that Ministry to strengthen its capabilities and capacities. This was not accomplished.

The National Housing Development Corporation (PERUMNAS) is responsible for the construction and management of Government's mass low-cost housing programmes.

Additionally there are various financial institutions charged with the provision of making home ownership loans.

Other Government institutions concerned with housing include the Directorate General Agrarian Affairs, Directorate General of Rural Development, Directorate General of Small-Scale Industries, Directorate General of Social Development, Directorate General of Transmigration, Directorate General of Cooperatives, Directorate General of Public Health, Directorate General of Monetary Affairs, etc. Their activities are also being coordinated by the Minister of Housing.

The document goes on to say, in view of the very critical relationship of the production and supply sector for the provision of materials, supplies and equipment in the realization of the need to put the housing development programmes on a strong basis, besides reaping the associated development and growth benefits, particularly in respect to industrial development, regional cooperation has existed between the Ministries of Industry and Public Works since 1974. This cooperation has been established formally through a Joint Decree of Ministers of Industry and Public Works supplemented by a Presidential Decree. This, in fact, had created a working committee comprising relevant officials from the two Ministries.

On the basis of the experience gained during 1974-79 this cooperation has been further strengthened by the issuance of a new joint letter of decision by the Ministers of Industry and Public Works on 7 June 1980. Through this "Joint Permanent Committee in the field of Building Materials and Construction Industry" has been established. This committee however is no longer actively engaged in the inter-ministerial cooperation activities formally entrusted to it. This perhaps explains why it has never provided policy guidance nor channelled for implementation project activities, nor follow-up on its outputs as intended.

As stated in the Development Support Communication section of the project, the project is oriented towards co-ordination, planning and promotional activities requiring an interface with at least three Ministries at the centre, a number of state organizations, national and regional institutions. The present location of the project, attached to the Ministry of Industry, its Research Directorate at that, has hampered the ability of other Ministries to identify itself with the project and its activities.

Although the project is attached to the Ministry of Industry, the Institutional Framework section does not discuss what role the Ministry of Industry plays in the housing sector nor in the project nor could there be found any justification for skewing project activity and supervision of its activities so closely toward the Ministry of Industry. Logically coordination should have taken place under the basis of the Ministry of Housing. The Ministry of Housing through the National Housing Policy Board would then have been able to sanction programmes developed by the project and issue directives to the multitude of organizations involved in their implementation.

In fact the project never received a valid sanction to carry out any of its programmes. The project established Steering Committee is to guide and

monitor operational activities of the project only. A sanction from a higher level body such as the National Housing Policy Board was never considered nor received. The project as it is institutionally set up, notwithstanding the many other inconsistencies and design faults, preclude its ability of the project to carry out its coordinate/planning/programming function. The project's CPOT team have made their own ad hoc arrangements to carry on as best as they can with skills they have.

At this juncture it is also interesting to note that an earlier draft of the project's document differed from the approved version in several important ways. None of the changes carried out to get the present version of the project approved represent an improvement. Part of the project's problems stem from these unexplained changes. Changes include deletion of three sorely needed industrial economists experts. Deletion of narrative of how this project can and should be interlinked with other Government and UNIDO/UNDP activities, and a revision of the institutional framework.

CHART I - represents how the structure of functional flow and relationship was envisaged in the earlier draft. Here we can see that the fit of the project structure although still parallel to existing structures, is very much under the Ministry of Housing.

CHART II - shows how the institutional structure as envisaged by the approved project document. Here we see an unexplainable and total shift from the Ministry of Housing to the Ministry of Industry. This is contrary to the spirit and institutional framework design explained so well in the project text. Here we should also notice that the project is operationally isolated from many of the actors involved in the housing sector. This set-up is not able to take full advantage of the housing sector institutional framework.

CHART III - depicts the project institutional framework as implemented. Here we can see that the project runs parallel to the Ministry of Industry structure, yet without a link with the Directorate General Small Industry - although the project is also trying to develop small industry. A structure like this does not maximize the utilization of existing structures making it difficult to get other critically important Ministry of Industry departments and other Governmental organizations strongly involved to integrate their activities with project activities. Most importantly upon termination the arrangements established are likely to disappear, especially at the CPOT level. Institution Building cannot take place with such an arrangement.

CHART IV - represents a simplified institutional framework for policies formulation and coordination of housing programmes. This serves to demonstrate how the Ministry of Industry, although playing a critical role in this sector, is not central to it. The project close associations to the Ministry of Industry precludes its ability to make an impact on the coordination of policy programmes and implementation of programmes.

UNDP/UNIDO ASSISTANCE IN THE DEVELOPMENT OF BUILDING MATERIALS AND SUPPLIES INDUSTRY FOR LOW-COST HOUSING

FUNCTIONAL FLOWS AND RELATIONSHIPS

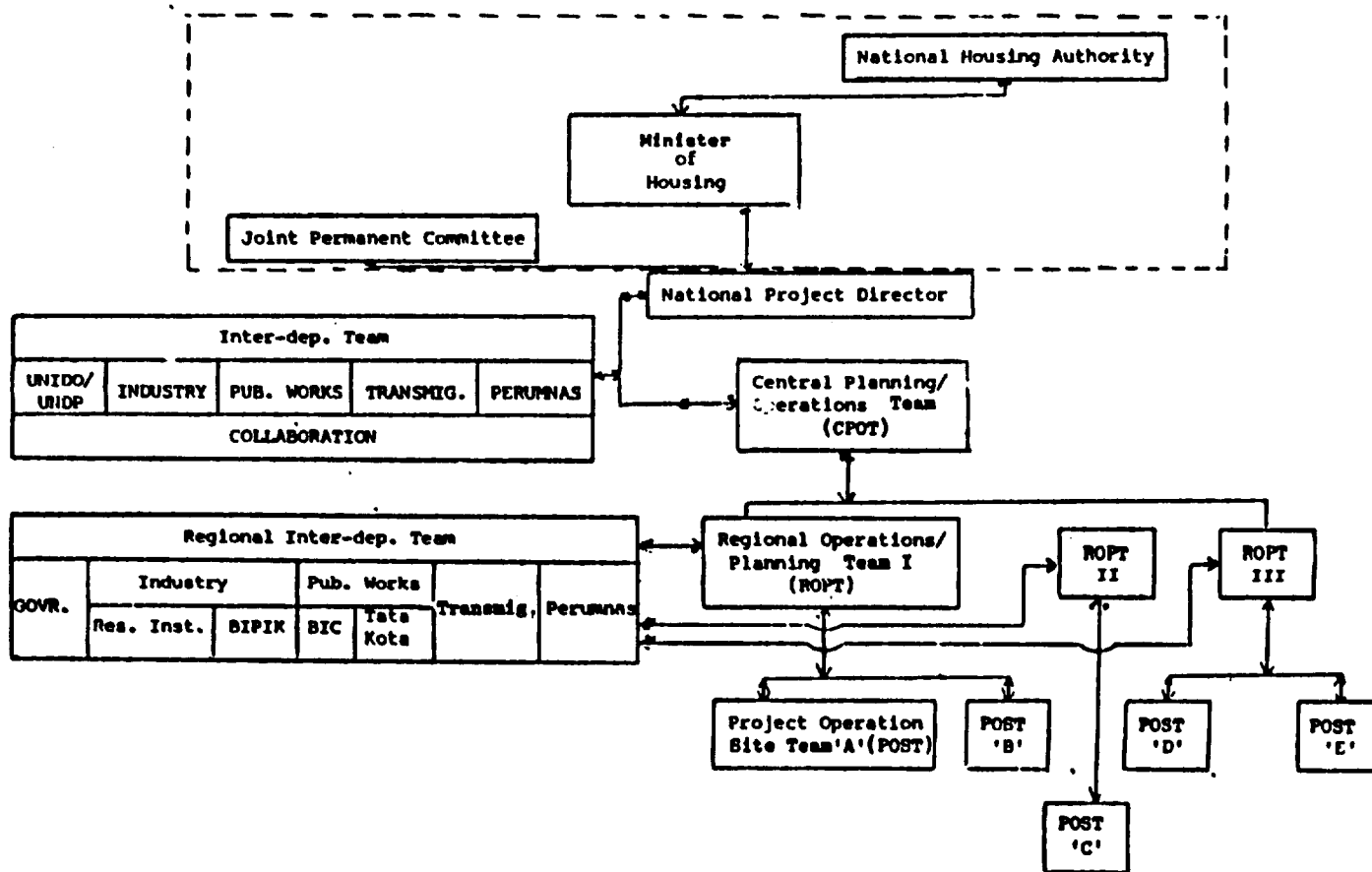
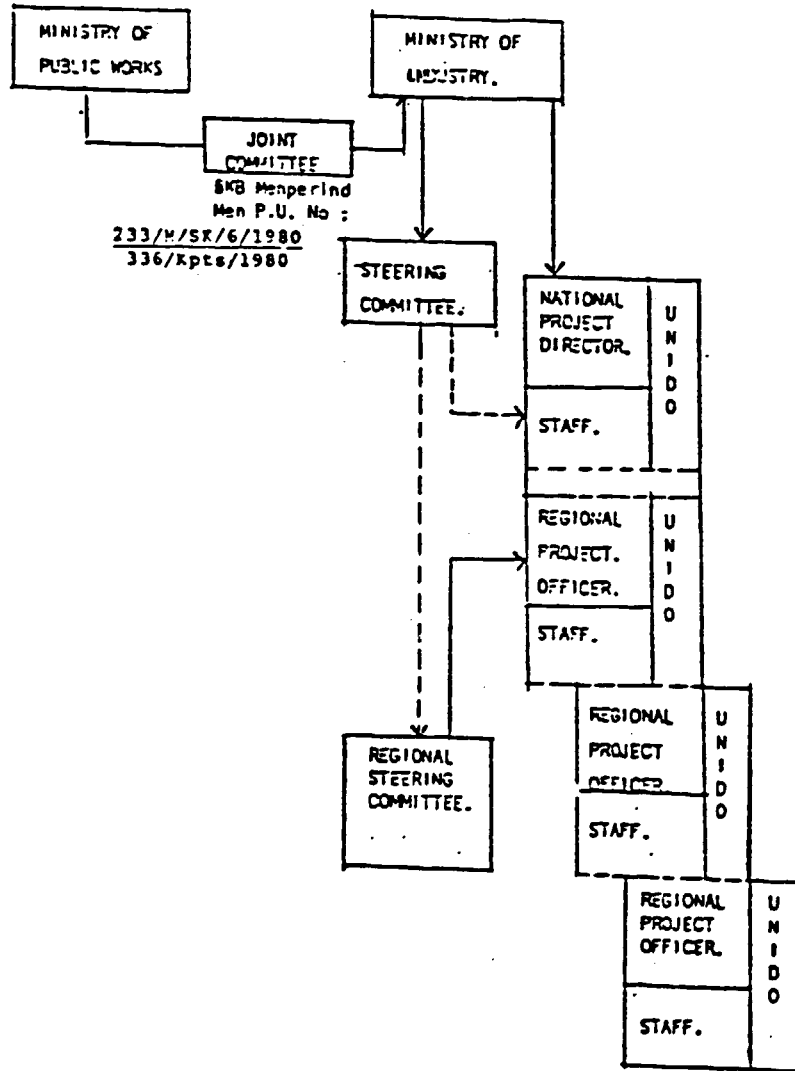
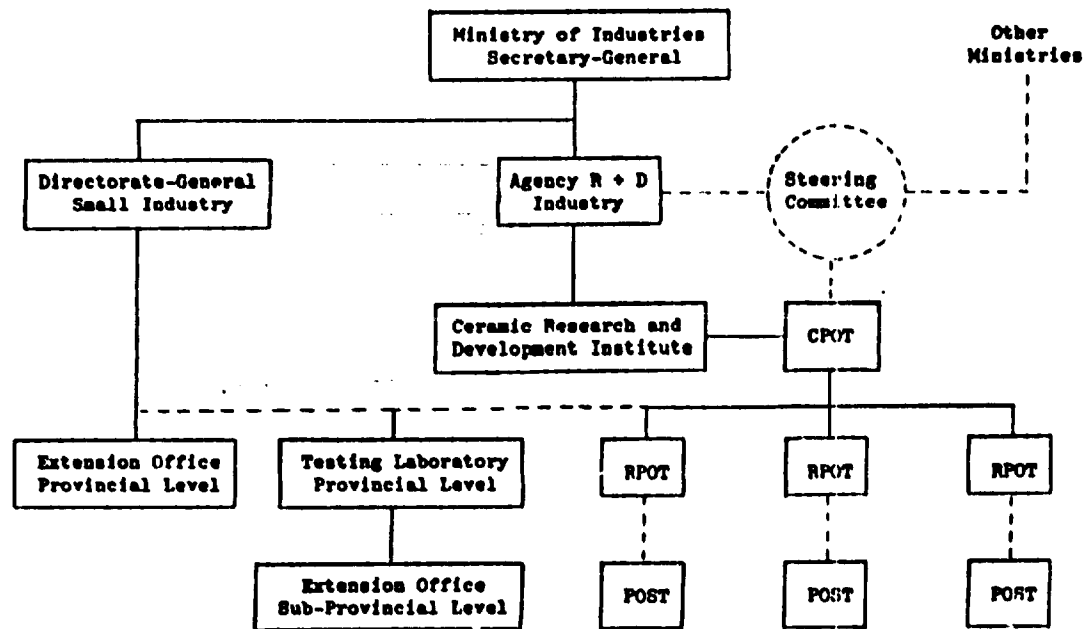


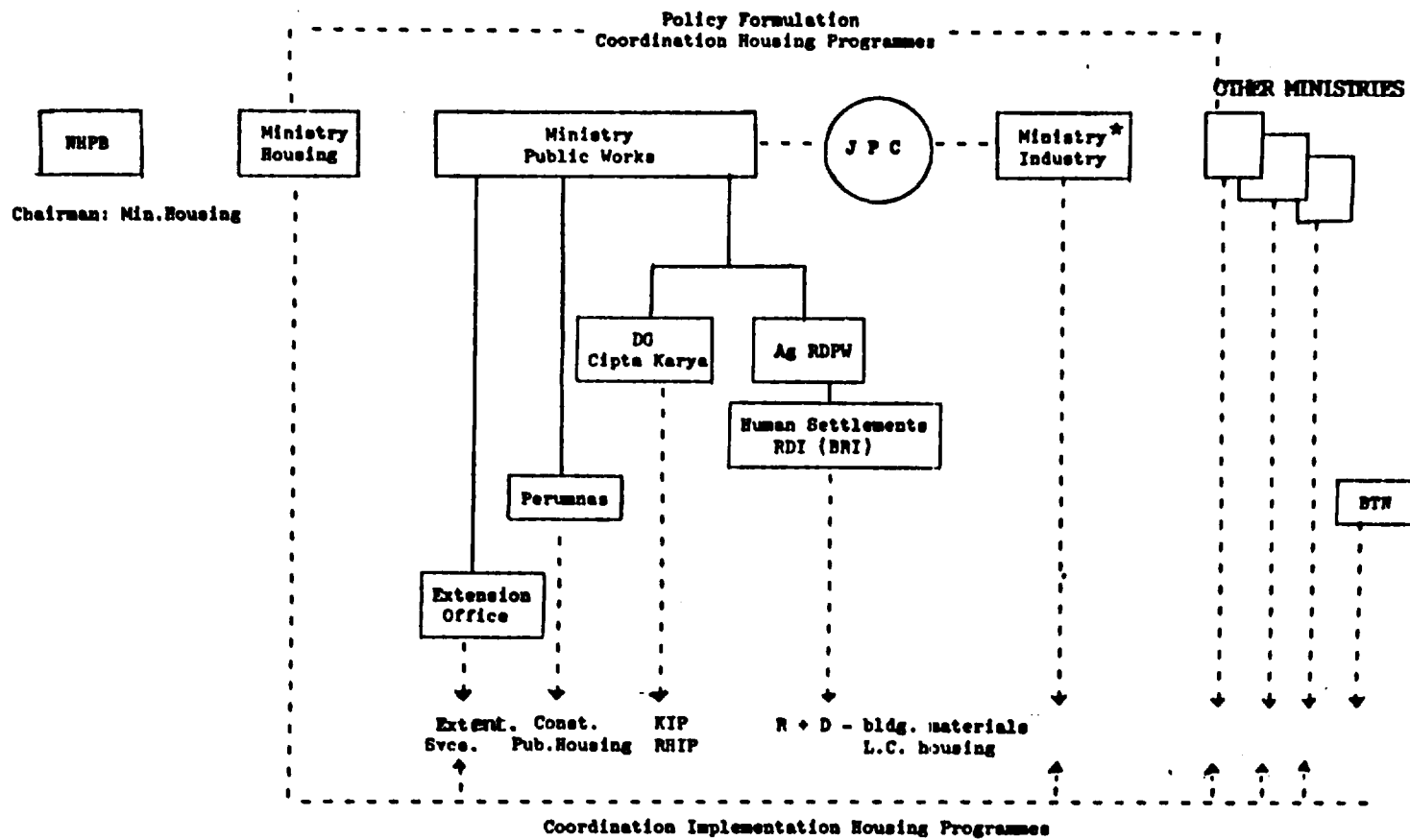
CHART II

CHART - INSTITUTIONAL FRAMEWORK PROJECT
IRS/21/006





INDONESIAN INSTITUTIONAL FRAMEWORK - 1984



*See chart III for details of Ministry of Industry Structure

CHART IV

CHAPTER IV PROJECT IMPLEMENTATION

A. GOVERNMENT MANDATE

The project started its operations during July 1983. This was preceded by the organization of the National Steering Committee (NSC) to supervise project operations. In its session of 24 January 1983 a decision was made to establish the three regional offices mentioned in the project agreement in East Java, East Kalimantan and South Sumatra and the establishment of ad-hoc Regional Steering Committee (RSC). It was also decided that the project should establish five production units, three for clay products and two for wood products, in the regions mentioned above, for which local "planning and operation site teams" (POST) were to be established. This decision was based on a proposal made by the nominated national team leader, Director of the Clay Research and Development Institute and former National Team Leader of project INS/74/034 "Assistance to the Industrial Development of Building Materials Manufacture". This decision is a deviation from the project agreement in the sense that instead of "operating up to five model programmes for the implementation of construction projects" it was decided to develop five building materials related industries in the pre-selected locations.

B. ACTUAL APPROACH FOLLOWED BY THE PROJECT

During the second semester in 1983 the team leaders prepared a more detailed project plan of operations as stipulated in the project document to augment the tentative workplan of this document. The tentative plan was oriented toward the following activities:

- ... create stable production systems in the building materials and construction industries especially in the operation regions of the project;
- strengthen the linkages between the building materials and construction industries;
- raise the economic vitality of the community by stimulating local participation in development of low-cost housing.

These objectives are different from those indicated in the project document and summarized in page 6 of this report. They were submitted to the NSC at the end of 1983, and in its second session of April 1984 the proposal was discussed. The workplan was not approved and general directives were given to adjust it.

A new proposal was prepared and discussed at the Tripartite Project Review Meeting held in November 1984. On that occasion several suggestions were made again to better focus project activities. Based on these a modified version was presented at the third meeting of the NSC, which focussed on the

project scope, which was finally accented by the NSC which also recommended preparation of a detailed programme of activities. This detailed workplan was completed in September 1985, for discussions at the next tripartite project review.

Project team leaders decided to take a pragmatic approach by trying to comply with the content of the project agreement as well as with the mandate given the NSC in January 1983. This approach is summarized in the following Chart No. V, according to the latest version of the workplan. Needless to say that in spite of the lack of an approved workplan, recruitment of experts was made and sent to the different regions, as if the plan of operations included in the project agreement was still valid.

C. PROJECT ORGANIZATION

After the signature of the Project Document, but before the international experts came, the Agency for Industrial Research and Development (AIRD) of the Ministry of Industry was designated as the project implementing agency. AIRD was given the responsibility to follow up on the establishment of project organization.

Regional Steering Committees (RSC) were established by Governor decrees at the request of the Ministry of Interior. The RSC's have a composition members similar to the NSC with members representing the same ministries and agencies, but at the regional level.

Chairman of RSC is the Second Assistant (responsible for economy, finance and development) to the Provincial Secretary of the Governor. The three selected provinces are South Sumatera, East Kalimantan and East Java.

In addition five Project Operation Sites were selected by the National Steering Committee in Talan Kelapa, Palembang in South Sumatra in Samarinda, Tenggarong in East Kalimantan and Malang in East Java, for the establishment of building materials production units. This decision became in fact the focus of project operations.

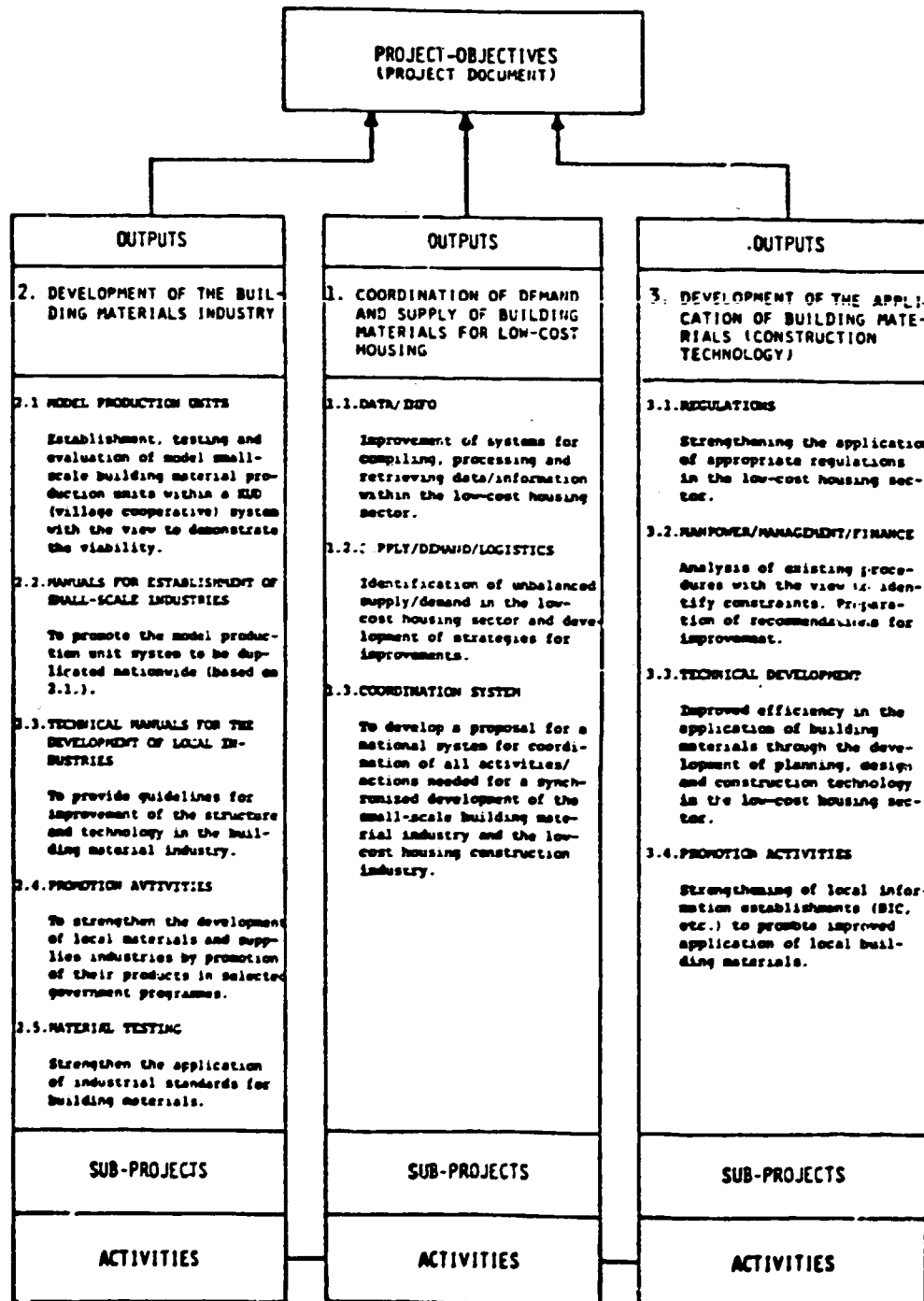
Project Structure - The Project team is organized as presented in Chart III, Page 16 in one central unit and three regional units, all staffed with UNIDO International and national experts and partime Government officials/experts who are consulted on an ad-hoc basis.

The Central Planning and Operation Team (CPOT) is located in Jakarta and forms the main body responsible for overall execution of the activities. Three Regional Planning and Operation Teams (RPOT) are located in Palembang, Samarinda and Surabaya respectively, and constituted by one international expert and a counterpart from the respective regional office.

Under each RPOT, Project Operation Site Teams (POST) are established at the administrative Center for the sub-regional level under which the selected sites for the Model Production Units falls. The POST is staffed by Government officials of the sub-regional level from the respective operation site. Terms of References for the CPOT, RPOT and POST are attached as Annex IV.

UNIDO/UNDP PROJECT INS/BI/006
DEVELOPMENT OF BUILDING MATERIALS FOR LOW-COST HOUSING

STRUCTURAL LINKS BETWEEN
PROJECT ACTIVITIES (SUB-PROJECTS) AND PROJECT OBJECTIVES



D. ACTUAL PROJECT ACTIVITIES

As indicated in Chart V project personnel ostensibly deal with activities in three different areas:

- development of the building materials industry;
- coordination of demand and supply of building materials for low-cost housing;
- development of construction technology.

Nevertheless, the project staff are mainly concerned with the establishment of experimental clay production units, establishment of a data bank of building materials required for the execution of low-cost housing construction projects, and preparation of technical guidelines and manuals for the establishment of small scale industries. These activities are analysed in the next chapter.

E. PROJECT INPUTS

The input identified in the project document, as it has been mentioned before, do not correspond totally to the character and technical requirements for complying with the original project objectives. Most of them are in line with the establishment of building materials industries and to strengthen the Ceramic Research and Development Institute (CRDI) in Bandung. CRDI was the institutional counterpart for a previous project INS/74/034 which aimed at strengthening the service of research and development capabilities of CRDI and BRI. CRDI is the institutional counterpart for this project. Even though the CRDI is highly specialized in research and promotion of ceramic products, its current activities are totally different from those specified in the project document for planning and programming and the decisions made by the Steering Committee to establish five specific production units, three of them for ceramic products. CRDI as an institutional counterpart for the project does not respond to needs of the project. In fact its dominant involvement represents a deviation from the project document.

Moreover the UNDP budget has allocated \$300,000 for equipment to CRDI in Bandung and three Regional Research and Development Institutes. This has no bearing to the rest of the document nor is it justified. It is also specified that US\$ 280,000 will be devoted for purchasing "equipment for creating demonstration/pilot facilities in various rural production clusters, for production of clay tiles, bricks, hollow blocks, lime, wood preservation, wooden elements and for field testing". Implicitly, then, the project staff was given the responsibility to establish small production units and to support the Ceramic Research and Development Institute in Bandung even though this task was not considered as a project objective, and not specified in terms of project activities in the rest of the document. UNDP/UNIDO therefore have given implicit approval for the undertaking of a third area of activities, namely, establishment of small scale building materials industries, when signing the project document.

Up to September 1985 the project has spent US\$ 1,263,225 from the UN contribution equivalent to 49.4% of the total budget (detailed in Annex VIII). Out of this, \$ 949,041 were utilized for project personnel, or 52.5% of money available, \$12,000 on subcontracts or (48%), only, \$16,300 were spent for training or (8.9%), \$265,029 was spent on equipment, (or 52%). According to the national team leader the Government has contributed with Rp. 488,352,309 of which Rp. 211,955,309 corresponds to AIRD's budget for the development of 5 production units. Rp. 126,397,000 corresponds to the contribution of the Ceramics Research and Development Institute and the three regional Institutes for Industrial Research and Development of the Ministry of Industry, and Rp. 150,000,000 invested by the production cooperatives. Details are given in Annex IX. Government expenses up to now are equivalent to 20.8% of the total indicated in the project budget. A detailed analysis of Government contribution is not possible because a budget for this project has never been prepared. The only budget utilized as national contribution are those of the Research and Development Institutes.

With respect to the equipment provided by the project a detailed status is presented in Annex IX. Five vehicles were purchased by UNIDO inspite of the fact that according to the agreement they were to be provided by the Government. A total of US\$ 38,765 were invested, but one of them transferred from Project INS/78/003, three of them are with central team, one in East Java and the other in East Kalimantan.

A total of US\$ 67,565 has been purchased for the Ceramic Research and Development Institute in Bandung, US\$ 84,807 have been invested in four extruders, 20 screwpresses and molds all of them installed in four clay tiles production cooperatives, US\$ 26,200 have been invested in three sets of material testing equipments and installed in three regional offices, US\$ 7,250 in two brick machines not yet installed. In addition, a computer Apple II, an electric typewriter IBM, a telephone system, a video equipment have been purchased for the Jakarta office with a total investment of US\$ 13,475. Three photocopiers in the amount of US\$ 4,590 have been sent to the regional offices. Total UNDP/UNIDO expenses in equipment amount to US\$ 203,887. For details see list of equipments in Annex X. Project records shows a total expense of US\$ 263,664 but the mission did not have time to clarify the reason for this difference.

A production unit related training course in clay production for 24 operators was conducted by the Ceramic Research and Development Institute (US\$ 24,500). Another training course in early '85 for 6 materials testing technicians was also subcontracted with CRDI (US\$ 4,000).

A socio economic investigation in the areas of Pakis and Turen was subcontracted with Brawijaya University in Malang in 1985 for a total of US\$ 4,000. The report submitted was appraised as excellent by the project team leaders. It provides useful baseline data. This is however only useful if it is actually used.

PART III

CHAPTER V ANALYSIS OF PROJECT RESULTS

The project as initially designed is characterized by a duality in its purposes and scope. On the one hand it was conceived to make a substantial contribution to the coordination of national efforts in planning and programming activities related to the construction of low-cost housing. On the other hand it was supposed to coordinate construction activities in specific regions and locations to test planning, programming and coordination mechanisms between the building material industry and the construction industry particularly with respect to the supply and demand situation.

A. Project activities

The project staff has devoted part of its time to activities related to the establishment of experimental building material industries. The international staff assigned to the central team in Jakarta has as national counterparts the staff of the Ceramic Research and Development Institute. The experts assigned to the three regions have as counterparts a few persons from the Regional Materials Testing Institute. The various organizations working with the project have differing hierarchies. As the project document does not indicate specific activities for the implementation of the experimental industries, the mission has not been able to evaluate project results in this area with respect to what was agreed in the project document. Moreover, it is not possible to analyze what has been produced by the project staff because the institutional national counterpart engaged in current activities of the CRDI, and the international staff are partially used to support CRDI activities. This overlapping of functions and responsibilities makes the evaluation of project activities difficult.

This lack of clear identification of what the project as such is supposed to generate is also applicable to the staff component to be provided to the project. The mission verified that what the Government considers their effective contribution to the project is the personnel and resources of CRDI, and of the Agency for Industrial Research and Development (AIRD) of the Ministry of Industry (as indicated in Annex V. "Expenditures of the Government). This is the reason why an extensive list of persons working in CRDI and AIRD has been provided by the project team leaders as the project counterparts working "part time" for the project. Hence the project has not had the benefit of full time national counterparts. In reality international staff are working on a daily basis with three national experts included in the UNDP budget, but with sporadic contacts at the central level with national staff of the Research and Development Institutes and from time to time with other government entities active in the housing sector. At the regional level international experts have a part time counterparts from AIRD. A list of experts is given in Annex VI.

According to the terms of reference for the international staff, they were supposed to concentrate their efforts in programming construction activities at the national, regional and local level, to guide the preparation of materials requirement schedules based on a data system fed with information related to actual building materials production capacity and demand of building materials for low-cost housing. They were also supposed to plan production of building materials, to design alternative strategies with respect to upgradation, expansion or new capacities for the manufacture and supply of materials. UNIDO hired the technical personnel according to these requirements, even though the real project objectives were different. In practical terms all international staff are working mostly to support CRDI and AIRD activities. It is interesting to note that they were recruited by UNIDO even though the project workplan had not been approved to launch the project second phase during which the experts were supposed to arrive with the exception of the chief technical advisor. Annex VI contains a table that shows the estimated arrival dates for all experts and extension of their contracts, as well as the actual time table.

According to the team leaders the project instead is engaged in several activities as shown in following Chart No. VI. The mission was not able to see the reports produced by the experts which according to the team leader, are internal working papers, and have not been officially submitted to the Government. A list of them is given in Annex VII

Basically the activities performed may be summarized in the following terms:

- databank - a programme has been developed by an associate expert who later on was hired as a consultant for 7 months. Some members of the project have contributed in the collection of basic data related to constructions programmes for low cost housing PERUMNAS, Ministry of Transmigration, and other public facilities. The information has been processed to identify the materials needed and quantity per project location and region. This programme is not compatible with parallel programmes developed by institutions involved in low-cost housing. Project staff also developed a programme for processing information about availability of building materials, but the programme has not been used for lack of an appropriate industrial survey and non-availability of data. Some project members have undertaken restricted sample surveys. This effort for lack of data and staff cannot be fully completed to determine the deficit of building materials per locality, as intended in the project document. This system needs to be integrated into the Ministerial structure if it is required at all.

- coding system to classify technical documents has been adapted by the project staff to organize a "technology bank". A few documents of different sources have been collected and are being classified according to these codes. Also this activity must be institutionalized within an organizational structure which will outlast the present project's duration.

- technical manuals for the establishment of specific industries. Data has been compiled by the project staff, and some drafts covering specific aspects have been prepared for internal discussions. This task, envisaged to cover clay roofing, wooden elements, wood treatment, concrete block and soil block industries, is far from completed. There is also the question which remains unanswered whether the manuals and external assistance are needed. Part of this material was already available from the Indonesian sources.
- standardized low cost house design. A proposal has been discussed with PERUMNAS prepared on modified current designs in which comparative cost studies are included.
- technical assistance for the establishment of four clay tiles production cooperatives. In this respect the project has supplied locally produced production equipment and project staff advisory assistance. The mission was able to detect some shortcomings in relation to a lack of knowledge on the comprehensive feasibility for the establishment of production units, lack of construction documents and designs for the erection of the plants, lack of financial support, problems of marketing the products, and in one case lack of a water source and transport. This matter was discussed at length by the mission with all parties involved, including the cooperative members. The support provided by the project in these operations has not been effective enough. The operations continues to be at the experimental level, repeating the experience of the predecessor project in the Solo District. It is doubtful that the design of these experiments will yield adequate feasibility to take a decision information for continuation of each programme on a national scale.
- Preparation of a project workplan. At least three full proposals have been prepared by project staff but all of them have not been formally adopted. The last one discussed with the technical team of the Project Steering Committee has been endorsed in principle by its members. The undertaking of this task has required a lot of efforts and lobbying the different Steering Committee members. All these proposals are designed to comply with the vague and confusing project mandate, and of questionable feasibility and utility. In the last workplan 55 activities are identified, so called sub-projects, of which several are not significant, others unfeasible, and others require further discussion. See Chart VI.
- Other research activities connected with the project in different areas, for which some documents were prepared are listed in Annex VII.

1983-1987 PROJECTS, TRANSMIGRATION

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B. PROJECT INPUTS

The inputs identified in the project document, as it has been mentioned before, do not correspond totally to the character and technical requirements for complying with the original project objectives. Most of them are in line with the establishment of building materials industries and to strengthen the Ceramic Research and Development Institute (CRDI) in Bandung. CRDI was institutional counterpart for a previous project INS/74/034 which aimed at strengthening the service R & D capabilities of CRDI and BRI. CRDI is the institutional counterpart for this project. Even though the Institute is highly specialized in research and promotion of ceramic products, its current activities are totally different from those specified in the Project Agreement for planning and programming and that the decisions made by the Steering Committee to establish five specific production units, three of them for ceramic products. CRDI as an institutional counterpart for the project does not respond to needs of the project. This in fact represent a deviation from the project document.

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CHAPTER VI CONCLUSIONS

A comprehensive evaluation project performance versus expectations as described in the project document was not possible because the approach, objectives and outputs of the project document agreed by the Government of Indonesia and UNDP/UNIDO are different from those specifically undertaken by the project. The on-going project activities and most of the project inputs are addressed mainly to the development of new experiences in the production of clay tile industries within existing cooperatives, strengthening at the same time the Ceramic Research and Development in Bandung, as if the project were a second phase to the R & D institution building project INS/74/034 "Assistance to the Industrial Development of Building Materials Manufacture". Instead the project was conceived to plan, coordinate and promote programmes and projects for the construction of low-cost housing with low-cost building materials using locally available raw materials.

In fact the project staff had a double mandate, when the project commenced in July 1983. The project agreement detailed the need to develop planning and programming capacities to deal with low cost housing as well as to address the institutional framework required to coordinate construction activities by linking the building materials industry with the construction industry. The other mandate was only indicated in the project budget that some of the project inputs were to support the Ceramic Research and Development Institute and regional materials testing laboratories, without justifying this intervention nor describing the activities to be undertaken. The Project Steering Committee reinforced this last implicit mandate when they decided to concentrate project efforts in the establishment of five production units in three regions of the country. This same Committee has never made any decision to adopt effective coordination mechanisms within the project framework for the implementation of the low cost housing programme.

This project has not been able to develop a permanent interaction with staff of the different ministries involved in the low cost housing sub-sector, nor has it been able to establish a coordination mechanism. What should be co-ordinated, including the specific tools to effect coordination amongst different programmes, projects and the actors involved.

In this respect the project concept to coordinate the public sector through a technical assistance project is wrong because this is an activity that involves all public institutions dealing with the construction sector, and the only possible way to do it is through the same institutions. Mobilization and coordination of multiple public units cannot be an objective of a temporary project without the existence of appropriate and strong structural linkages with the public sector. The project could have given technical support to on-going coordination efforts if workable mechanisms would have been established, or if the international staff would have been assigned to different offices and to work with national experts. The project personnel has spent time to prepare proposals to coordinate the housing sector activities they were however never adopted.

On different occasions the parties monitoring the project, namely the UNDP Resident Representative and the present SIDFA, expressed their uneasiness with respect to the project performance. The UNDP Resident Representative presented his concerns to the Government in writing suggesting that his views should be discussed in-depth during the Tripartite Project Review that took place in November 1984. No conclusive results was possible and tripartite in-depth evaluation of the project within the following six months decided to be undertaken.

The situation found by the Mission turned out to be more serious than anticipated. This is most regrettable after 27 months of project activities, and when 50% of the project budget has been spent and another important portion already committed.

The project has produced up to now a limited number of scattered results with almost no potential for substantial impact in housing construction sector.

It is evident that the project role to coordinate institutions dealing with low-cost housing and to address major areas needing improvement in the public sector cannot be fulfilled. The project has not managed to identify adequate paths to mobilize the existing potential of the sector. Instead the project staff has had to fall back to concentrate efforts to experiment with small building materials industries production units.

The problematical institutional framework, as discussed in Chapter III is reflected in the projects not being able to achieve a balanced deployment of national and international staff, both in Jakarta and in the regions, despite the partial secondment of regular Government staff to the project. The project teams were from the beginning established parallel but not part of the existing Government hierarchies, making it almost impossible to coordinate and support institutional building. The evaluation team considers that this development has rendered the project to be not feasible as designed.

Even if the project institutional framework had been properly installed to enable it to play a meaningful role in planning, programming and coordinating the skilled composition of the present international team would be inadequate for the tasks envisaged. The job at hand would require industrial economists, planning experts with housing sector experience.

Project staff organised their own work programme and tasks that resulted in individual contributions covering a large number of objectives, instead of operating through an integrated workplan responsive to the planned needs of the project. It is the opinion of the experts, as well as of the mission, that their capabilities and experience has not been fully used. The relevance of their work is very limited for the time being due to the isolation in which they have worked up to now, and to the diversity and uncoordinated tasks they are performing.

CHAPTER VII RECOMMENDATIONS

As seen in the previous sections of this report, the project is plagued with difficulties on several fronts, not only with respect to the project design, but with the implementation of actual project activities as well. The projects relevance and effectiveness has been questioned.

The lack of precision in the initial project objectives, the vastness of the project scope, the lack of inputs commensurate with the tasks at hand and the nature of expertise put forward to perform them, are some of the most important factors that call for an in-depth revision of the project document. This is also reinforced by the fact that, even before the project started to operate, the National Steering Committee had decided to concentrate project efforts in the establishment of specific building materials production units not specifically considered in the agreement and in the creation of three regional offices even though the pre-requisites for their implementation had not been met. Therefore project personnel are executing different tasks than those specified in the agreement and involved in operations that are of questionable relevance.

Another factor that calls for an extensive revision of the project document is the existence indeed of two different projects within a single framework, one addressing the planning and programming of the low-cost housing sub-sector and the other with the identification and promotion of building materials industries.

The technical capacity existing in the project is almost entirely in line with the introduction and promotion of small scale industrial technology. In spite of this fact the project staff have tried to prepare proposals and a document to deal with the planning aspects of the project document. They are not sufficient to address a highly complex problem that requires a vast number of technical staff. In this respect the absence of specialized counterparts and the isolation of project personnel from established institutions that deal with planning the construction sector have minimized an adequate use of expertise made available in the project, or which in theory could be made available to the project. Nevertheless there are several on-going activities that need to be transferred within existing the respective institutions normally responsible for such activities.

Based on the findings and conclusions of the mission, some of which were indicated in previous reports and official letters, the evaluation team makes the following recommendations in the spirit of focusing future technical assistance activities and to make a better use of the work carried out up to now as well as of technical expertise made available to the Government for the limited period of time remaining in the project.

A. RECOMMENDATIONS CONCERNING THE PROJECT SCOPE AND OBJECTIVES

The most important point that must be considered is the determination of the areas in which technical assistance from the UN is really required. After a period of five years since the project was conceived, Government priorities may have changed and as a result the project objectives may be obsolete. In this respect it is suggested that the Government review their technical assistance needs in the housing sector with a view toward creating lasting increased capabilities and capacities within existing institutional and organizational structures. Based on these actual needs it is suggested to determine the priority areas and most critical problems that require special and immediate attention particularly in areas susceptible to the kind of technical assistance the U.N. is able to provide i.e. direct support and/or institution building. After a decision has been made by the Government and an agreement reached with UNDP and UNIDO, the project will certainly require a major redesign.

The felt lack of real identification with project activities from the institutional participants in the National Steering Committee may be a good indicator that the project should be readdressed to respond to urgent Government needs. Only if these needs are clearly identified with the institutions to be assisted can technical support be effectively given. As the assistance already made available to the Government will have consumed about 60% of all financial inputs available from the UNDP by the end of 1985, a prompt reaction from the Government is strongly suggested for a better planning of the resources still available.

At the time when the project will be redesigned the mission suggests that the following elements are born in mind that:

- technical assistance should be given to specific existing institutions and to specific national staff members for an effective mutual collaboration and transfer of knowledge through on the job-training;
- the project should help the Government in its efforts to strengthen existing institutions;
- that financial resources be justified and programmed in accordance with identified ones.

If a major refocus of the project cannot be agreed upon by the Government and UNDP/UNIDO before the end of the year, the mission recommends that project operations should be terminated subject to the conditions mentioned below are met.

B. RECOMMENDATIONS CONCERNING THE EXISTING PROJECT

The mission wishes to emphasize the need to immediately break the isolation in which the project works, particularly at the central level, for a proper utilization by the Government of the limited project achievements up to this date. While the general orientation is being revised including its institutional setting by the Government and in any subsequent technical assistance, actual project personnel should be closely linked to the substantive units and staff responsible for the activities which are to be strengthened. The immediate measures that the mission recommends to be adopted are the following:

- a high level and independent specialist in the field of industrial economics and small scale industrial development preferably in the field of building materials should immediately follow this evaluation mission to thoroughly assess the socio-economic cost-benefit viability of the field activities undertaken by the project. If on-going project activities are found feasible with a potential for national replication given to the technical, organizational and financial constraints existing in Indonesia, he should make detailed proposals on how to ensure that these activities will lead to a fully worked out proposal which will at the end of the project enable Government decision-makers to take a decision based on comprehensive and systematic analysis. If the national programme is found feasible, the package should fully detail its implementation phase. Alternatively he should make detailed recommendations on how to round up current project activities not later than June 1986;
- in the interim each expert of the project should be assigned specific counterpart units and national staff of the public administration for the accomplishment of their present duties;
- to analyse and transfer to specific public units on-going project activities and completed proposals and reports: (i.e. data bank and computer, revised low-cost housing designs etc.);
- to investigate the effects of the introduction of 150 extruders manufactured by a local private enterprise similar to other five being installed in cooperatives by this project.

C. OTHER RECOMMENDATIONS

- The modalities and organizations which might get involved in any national programme as discussed above should not be predetermined nor should they be changed during the implementation phase without careful consideration of the implications. Moreover, the existing

institutional capacities for small-scale industry development should be objectively considered as a possible mechanism for the implementation of any future project supported national programme. The same applies to the cooperative system existing in Indonesia;

- Technical assistance is efficient and effective in providing limited and clearly defined "Direct Support" or preferably by providing assistance to establish or strengthen organizational/institutional capabilities to carry out their roles or mandates. Technical assistance should not therefore get involved in operational activities as a means to an end. Nor should technical assistance be instrumental in setting up temporary parallel structure to overcome bottlenecks within existing Government arrangements. This confusion between what Government should do and what the project should do is common within the system. An improved training and clearer guidelines in this respect are required.

ANNEX I

TERMS OF REFERENCE FOR THE EVALUATION MISSION

In accordance with the provisions contained in the UNDP Policies and Procedures Manual and also the Revised Policies and Procedures of UNDP for Monitoring, Evaluation and Reporting, the primary purpose of the Evaluation Mission is to:

1. assess the achievement of the project against the set objectives, targets and expected outputs; this will include a re-examination of the adequacy of project design;
2. examine the extent to which the results/outputs achieved by the project have contributed towards meeting the housing programmes through greater participation of Ministries and Agencies involved in the programme and in ensuring the timely availability of building materials equipment and supplies from local sources of adequate quality at the various major building locations;
3. identify and assess the factors which facilitated the achievement of the project's objectives or deterred their fulfillment;
4. make detailed recommendations for future action.

As part of the above tasks, the Mission will specifically review and make detailed recommendations on:

- (a) the detailed scope of the project and the schedule of activities (in the form of "sub-projects") elaborated by the project management - their relevance and adequacy for the objectives of the project and feasibility of achievement within the framework of the project including the available UNDP budget;
- (b) UNDP and Government inputs required for adequately meeting the activities and outputs envisaged under (a) above and the need for revisions from what is contained in the present Project Document;
- (c) existing institutional framework for the project - whether it is adequate and appropriate for the recommended future activities and to ensure the continuation of an operating system after the termination of the project;
- (d) existing project organization in Jakarta and the regions - its appropriateness and adequacy for the proposed activities;
- (e) the availability of counterpart personnel for the proposed activities/outputs and to ensure a continuing viable capability to perform the tasks initiated by the project;
- (f) the impact and effectiveness of the project's work so far, in so far as is appropriate at this point in time and in relation to inputs into the project by UNDP and the Government.

The mission should propose the outlines for substantive revision of the Project Document, if warranted.

Annex II

LIST OF PERSONS MET AND INSTITUTIONS CONTACTED

Monday 23.9. JAKARTA

UNDP

Gamil M. Hamdy, Resident Representative
Dr. Barker, Deputy Resident Representative
G.L. Narasimhan, Senior Industrial Field
Advisor (SIDFA)
Ram T. Batra, Assistant Resident
Representative
Nurvo Martokusumo, Senior Programme Assistant

CPOT Project Office

Ir. Pratopo Soemitro, NPD
Thomas Ringsholt, CTA, INS/81/006
B. Soedeberg, Expert Building Materials
Production and Planning
S. J. Farrall, Expert for Industrial
Promotion and Extension Services
L. E. Leasa, National Expert Building
Materials Production and Planning
J.M. Simpoha, National Expert Industrial
Promotion and Extension Services
Ms. PirkkoLiisa, Associate Expert, Economist

Tuesday 4.9

Ministry of Housing

Minister of Housing, Drs. Cosmas
Batubara
Mr. Salmon Koodyat, secretary Ministry of
Housing
Mr. Gardjito, Secretary of the Agency of
Research and Development of Industry,
Ministry of Industry.

Wednesday. 25.9

Ministry of Cooperatives

Mr. Sularso, Director General of Cooperative Development, Ministry of Cooperatives

Mr. Mamiet Maryono, Director of Electrical Cooperatives

Mr. Irwan, Chief of Sub-Directorate of Industrial Directorate of Business Promotion

Mr. Zakaria, staff of Sub-Directorate of Business Promotion

PERUMNAS

Mr. Saleh Amiruddin, Director of Planning, PERUMNAS

Thursday 26.9 SOLO

Mr. Petrus Suterjoso, Extension Officer S.S.I. Office of the Department of Industry, Sukaharjo

Mrs. Endang, Deputy in charge of Solo, Ministry of Industry

Mr. Sumardi, Ceramic Research Development Officer CRDI

Mr. Sunarso Danusaputro, Field Supervisor

Mr. Sigit Purvatmo, Field Supervisor

Mr. A.. Irfan, Project Manager of PERUMNAS, Unit in Solo

Friday 27.9 SURABAYA

Mr. Tibor Bartha, Expert for Building Materials and Construction Industry, RPOT

Mr. K. Sumardi, Ceramic R & D Officer, CRDI, Bandung

Mr. Parni, RPOT assistant, RPOT III

Mr. Paribowo Soetigno, Department of Industry, Head of RPOT

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PAKIS

Mr. Formati Penguans, KUD (Village Comm)
Mr. B. Surdrapto, First Head of KUD
Mr. M. Said, Second Head of KUD
Mr. M. Muhaimin, Secretary I
Mr. Sutono Asi, Secretary II
Mr. Supardi, Finance Secretary
Mr. Eddy Mangindaan, Manager

TUREN

Mr. M. Toislin, Mayor
Mr. Soetarto, Head of KUD
Mr. Pudjianto, Secretary
Mr. Sudarminto, Manager
Mr. S. Bambang, Assistant Manager
Mr. Asmut, Secretary Raw Material
Mr. Jamaji, Operator
Mr. Nasir, Secretary
Mr. Al Harid, Operator
Mr. A. Khotib, Head of Tile Unit
Mr. Hodri, Cooperative Member

Friday

28.9 JAKARTA

BAPPENAS

Mrs. Suardi, BAPPENAS

Ministry of Public Works

Mr. Rahmat Mochtar, Secretary General,
Ministry of Public Works

Mr. Sulistiyo, Ass. of Directorate General,
Cipta Karya, Ministry of Public Works

Mr. Sulito, Assistant Secretary

Mondav	30.9	<u>De-Briefing Resident Representative</u> Mr. Gamil Hamdy, Resident Representative Mr. G. Narasimhan, SIDFA Mr. Nurvo, Senior Programme Assistant Ms. Chieko Nakabashi, Junior Professional Officer, Assistant to SIDFA
Tuesday	3.10	<u>Ministry of Housing</u> Salmon Kodvat, Secretary, Ministry of Housing and Secretary of Project Steering committee, Ministry of Housing.
Thursday	3.10	Round up meeting. Presentation of the mission's conclusions and recommendations to the Project National Steering Committee, UNDP Resident Representatives and SIDFA

PARTICIPANTS

Mr. D. Barker, Deputy Resident Representative, UNDP

Mr. Salmon Kodyat, Secretary, Ministry of Housing

Mr. Gardjito, Secretary Head of AIRD, Ministry of Industry

Mr. Sudarmadji, AIRD, Ministry of Industry

Ms. Suwarti, BAPPENAS

Mr. Saleh Amiruddin, Director of Planning, PERUMNAS

Mr. Zulkarnain Aksa, Institute of Human Settlements, Ministry of Public Works

Mr. Sumaruto, Bank Tabungan Negara (BTN)

Mr. Alex Pih, Dit. Reg. Deve., Ministry of Interior

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Mr. Darmawi, Dit. Reg. Dev., Ministry of
Interior

Mr. Pratopo Soemitro, NPD, INS/81/006

Mr. Thomas Ringsholt, CTA, INS/81/)))*

Mr. Anthony R. Patten, Deputy Resident
Representative - UNDP

Mr. G. L. Narasimhan, SIDFA/UNIDO

Mr. Boris des Petrossian, UNIDO Headquarters

Mr. Chieko Nakabavashi, SIDFA's Office

Mr. Nurjo Martokusumoo, SIDFA's Office

TRANSLATION

MINISTRY OF INDUSTRY, REPUBLIC OF INDONESIA

MINISTER OF INDUSTRY'S DECREE

No. 93/M/SK/3/83

ON

ESTABLISHMENT OF STEERING COMMITTEE FOR UNIDO TECHNICAL ASSISTANCE PROJECT

THE MINISTER OF INDUSTRY

- CONSIDERING: a) That for the smooth implementation of the UNIDO/UNDP Technical Assistance Project to the Government of Indonesia, i.e. "Assistance in the Development of Building Materials and Supplies Industry for Low Cost Housing" INS/81/006 to support the development of Low Cost Housing in Indonesia, it is considered necessary to establish a Steering Committee for the UNIDO Technical Assistance Project.
- b) That for this purpose it is necessary to issue a decree.
- REMINDING : 1. Decree of the President of the Republic of Indonesia No. 44, 1974 regarding Organization Pattern of the Ministry of Industry.
2. Decree of the President of Republic of Indonesia No. 45, 1974, and No. 27, 1978 regarding the Organization Structure of the Ministries.
3. Decree of the President of Republic of Indonesia No. 13, 1978.
4. Decree of the Minister of Industry No. 175/M/SK/10/1978 and No. 158/M/SK/3/1981 regarding the Organization and Job Description of the Ministry of Industry.
5. Joint Decree of the Minister of Industry and the Minister of Public Work No: 233/M/SK/6/1980 regarding Permanent 336/Knts/1980 Committee between Ministry of Industry and Ministry of Public Work.

D E C I D E D

- FIRST : Establish a Steering Committee for UNIDO/UNDP Technical Assistance Project for the Development of Building Materials and Supplies Industry for Low Cost Housing, (INS/81/006), further mentioned as SC, membered by representatives of Ministries and Institutions linked with the implementation of the above mentioned project as follows:
1. Head of the Agency of Industrial Research and Development of the Ministry of Industry, as Chairman.
 2. Secretary of State Minister of People Housing, as Secretary
 3. Director General of Regional Development, Ministry of Home Affair, as Member.
 4. Director General of Transmigration, Ministry of Man Power and Transmigration, as Member.
 5. Director General of Cipta Karya, Ministry of Public Work, as Member.
 6. Director General of Cooperative, Ministry of Trade and Cooperative, as Member.
 7. President Director of PERUMNAS (National Housing Corporation), as Member.
 8. President Director of Bank Tabungan Negara (State Savings Bank), as Member.
- SECOND : The Committee Function
1. Coordinate the implementation of the UNIDO/UNDP Technical Assistance Project.
 2. Supervise and evaluate the implementation of the project.
- THIRD : In the execution of its function, the SC has the task to:
1. Formulate short term and long term work programme of the UNIDO/UNDP Technical Assistance.
 2. Formulate concept, policies and steps needed to support the development of Building Materials Industries which is linked to the Low Cost Housing Development Programme.
 3. Coordinate all the Regional Committee Activities of the selected Provinces where the project activities will be executed.

Annex III
Page 3

- FOURTH : The SC submit timely written report on the results of the project implementation, every 6 months to the Minister of Industry.
- FIFTH : In the implementation of daily activities the SC will be assisted by the Technical Team consisting of the following members:
- Chairman : the Secretary of SC
 - Secretary : Secretary of the Agency for Industrial Research and Development, Ministry of Industry.
 - Members:
 1. Representative of the Ministry of Industry
 2. Representative of the Ministry of Home Affair
 3. Representative of the Ministry of Man Power and Transmigration.
 4. Representative of the Ministry of Public Work.
 5. Representative of the Ministry of Trade and Cooperative
 6. Representative of the Ministry of Perumnas (National Housing Corporation).
 7. Representative of the Ministry of BTN (State Savings Bank).
- SIXTH : In the Implementation of its activities the Technical team (TT) may organize working groups when required.
- SEVENTH : The Secretariate of SC will be stationed in the office of the Agency for Industrial Research and Development and provide administrative services needed by the SC and supporting units.
- EIGHT : The SC hold meetings at least twice a year, while the TT at least once in two months.
- NINTH : All expenditures required by the SC will be born by the Building Material Research Project of the Agency for Industrial Research and Development through budget line No.: 15.2.03.420 458.19.07.01.

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TENTH : This Decree will be effective since the date of issue.

Decided in Jakarta
March 7, 1983

Minister of Industry

(signed)

A. R. SOEHOED

cc.:

1. The Coordinating Minister of EKUIN/
Chairman of the National Planning Board
2. Secretary General, Inspector General, and
Director Generals and Head of Agency for
Industrial Research and Development.
3. Bureau Head for Law and Organization.
4. Personnels involved.
5. File

TERMS OF REFERENCE

POSITION: CENTRAL PLANNING AND OPERATION TEAM (CPOT)

1. Function :

- Conduct planning, programme activities and operation of the project of INS/81/006 as to achieve goal and targets determined by taking into its considerations guidance and recommendation of SC;
- CPOT is directed by the NPD.

2. Task :

- In the daily activities CPOT is directed by the National Team Leader in cooperation with the International Team Leader;
- Taking into consideration: the project document, guidance and directives of SC and NPD;
- Identify the capability of existing BEMI and CONI and the development of the project site;
- Establish programmes, project activities and targets as to achieve goal and objectives of the project;
- Conduct interlinkage of institutions and personnels concerned with the project activities;
- Assist the SC for the establishment of RSC, establish RPOT and POST;
- Cooperate with UNIDO's International Experts as well as National Experts;
- Conduct daily project management activities;
- Control and monitor execution of the project in RPOT's and POST's;
- Consult NPD continuously;
- Prepare and report the project performance.

3. Responsibility :

Directed by the National Project Director CPOT is responsible to the SC concerning planning operation and the achievement of the project.

TERMS OF REFERENCE

Position : REGIONAL STEERING COMMITTEE (RSC)

1. Function :

- Elaborate guidance and policies of the Minister of Industry and SC in the strategy to achieve goal and objectives of the project in the working area of RPOT and POST concerned.
- Elaborate interlinkage of BEMI, CONI and institutions related to the implementation of the projects programme and activities in the area concerned.
- Provide guidance and recommendation to RPOT and POST.
- RSC is chaired by the assistant of the Secretary of the Provincial Government.

2. Task :

- Identify and substantiate the participation of parties and institutions concerned to the projects programme in the working area of RPOT and POST.
- Elaborate goal and objectives and approaches of the implementation of the RPOT's programme.
- Integrate parties and institutions in the area concerned interrelated with the project programme.
- Provide guidance, recommendation to RPOT and POST.
- Conduct control to the implementation of programmes in RPOT and POST and achievement of targets.

3. Responsibility :

Chaired by its Chairman, the RSC is responsible to the SC, for the guidance to RPOT and POST in the area concerned.

TERMS OF REFERENCE

Position : REGIONAL PLANNING AND OPERATION TEAM (RPOT)

1. Function :

- Conduct and elaborate planning, programme activities and operation of the Regional Project as to achieve goal and targets determined by taking into consideration guidance and recommendation of RSC and directives of NPD.
- The RPOT is directed by the RPO

2. Task :

- Taking into consideration: the project documents, guidance by RSC and directives of NPD.
- Identify the capabilities of existing BEMI and CONI and the development of the project site.
- Establish programmes, project activities and targets as to achieve goal and objectives of the regional project
- Conduct interlinkage of institutions and personnel concerned with the project activities.
- Determine and establish POST in the project area concerned.
- Conduct daily activities of the regional programme of the project.
- Manage the regional activities of the project, the POST concerned in the region.
- Control and monitor the implementation of the concerned POST's activities, progress and achievement.
- Consult the RSC concerned.
- Prepare and report performance of the regional project to NPD.

3. Responsibility :

Directed by the RPO, RPOT is responsible to the NPD concerning the planning, operation and performance of the regional project.

TERMS OF REFERENCE

Position : PROJECT OPERATION SITE TEAM (POST)

1. Function :

- Conduct the physical construction and development of BEMi, CONI and the interrelated activities to the ultimate goal of the project.
- POST is directed by the Site Officer (appointed among NP of POST).

2. Task :

- Prepare location for the project
- Conduct construction of BEMi according to planning
- Prepare operation of the production unit
- Conduct skill training of operators
- Cooperate with CONI and institutions concerned with the project programme
- Conduct trial operation of the production unit
- Manage the production unit
- Conduct supply of building material produced to the consumers
- Prepare and report the project site performance and achievement
- Coordinate parties and institutions concerned with the project's programmes
- Manage programmed construction, production and supply of building materials products.

3. Responsibility :

Directed by the Site Officer, POST is responsible to PRO

ANNEX V

UNITED NATIONS DEVELOPMENT PROGRAMME

				Annex 2 Government Project Personnel	
PROJECT PROGRESS REPORT	Project Number INS/81/006	Executing Agency UNIDO	Reporting Period 1.1-30.6.1985		
Post No.	Post Title	Name of Incumbent	Full/ Part Time	Assumed Duty (Mo/Yr) Sched. Actual (Est.)	
<u>CPOT Jakarta</u>					
1.	National Project Director	Mr. Pratopo Soemitro	F	10-82	10-82
2.	Secretary, Agency for Industry, R&D, Ministry of Industry	Mr. Gariito	P	4-84	4-84
3.	Senior Staff of AIRD	Mr. Sudarmadji	P	4-83	4-83
4.	Senior Staff of CRDI	Mr. Sumardi K	P	4-83	4-83
5.	Senior Staff of CRDI	Mrs. Widad Baraba	P	4-83	4-83
6.	Senior Staff of CRDI	Mr. Purnomo	P	4-83	4-83
7.	Senior Staff of CRDI	Mr. Suropto	P	4-83	4-83
8.	Senior Staff of CRDI	Mr. Dien Supriata	P	4-83	4-83
9.	Senior Staff of Sec. General of Ministry of Industry	Mr. Siagian	P	4-84	4-84
10.	Senior Staff of State Ministry of Public Housing	Mr. Suarli Salam	P	10-83	10-83
11.	Senior Staff of Ministry of Public Housing	Mr. Sudadi	P	10-83	10-83
12.	Senior Staff of Min. of Public Works	Mr. G. Susalit	P	10-83	10-83
13.	Senior Staff of Dir. General Reg. Dev	Mr. Dharmin Z.	P	10-83	10-83
14.	Senior Staff of Ins. for Human Settlement R & D	Mr. B. Tulaar	P	4-83	4-83
15.	Senior Staff of AIRD	Mr. Amrin Thaib	P	4-83	4-83
16.	Staff of AIRD	Mr. Nursyirwan	P	4-84	4-84
17.	Staff of AIRD	Mr. Budi Sukisno	P	4-84	4-84
18.	Staff of AIRD	Mr. Djaidi	P	10-83	10-83
19.	Staff of AIRD	Mr. Tommy Soebroto	P	4-84	4-84

UNITED NATIONS DEVELOPMENT PROGRAMME

PROJECT PROGRESS REPORT	Project Number INS/81/006	Executing Agency UNIDO	Reporting Period 1.1-30.6.1985	Annex 2 Government Project Personnel
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Post No.	Post Title	Name of Incumbent	Full/ Part Time	Assumed Duty (Mo/Yr)	
				Sched.	Actual (Est.)
20.	Staff of AIRD	Mr. Harrati	P	10-83	10-83
21.	Staff of AIRD	Mr. Ugi Sugiono	P	4-84	4-84
22.	Staff of CPOT	Mr. Pribadi K.	F	4-84	4-84
23.	Staff of CPOT	Mr. Rimo S.	F	10-83	10-83
24.	Staff of CPOT	Ms.Ulfah	F	4-84	4-84
25.	Staff of CPOT	Mrs. Astrid Ifi	F	10-83	10-83
26.	Staff of CPOT	Mr. Wasono	F	10-83	10-83
27.	Project Driver	Mr. Sukardi	F	10-83	10-83
28.	Project Driver	Mr. Nde Herry	F	4-84	4-84

RPOT I South Sumatra

29.	Head of Ins. for Industrial R & D Palembang as Head of RPOT I	Mr. Iskandar	P	4-83	4-83
30.	Senior Staff of IIPD, PLMB. as Sec. of RPOT I	Mr. Burmawi	P	4-83	4-83
31.	Senior Staff of Reg. Planning Board, South Sumatra	Mr. Bakri AR	P	4-83	4-83
32.	Senior Staff of the Reg. Government	Mr. HM Umar Choiri	P	10-83	10-83
33.	Senior Staff of Regular Public Work Office	Mr. Sudartomo	P	10-83	10-83
34.	Senior Staff of UNSRI, PLMB,	Mr. Djamilus Zainuddin	P	4-83	4-83
35.	Senior Staff of IIRD, PLMB	Mr. M. Dani S. Minha	P	4-83	4-83

UNITED NATIONS DEVELOPMENT PROGRAMME

				Annex 2 Government Project Personnel	
PROJECT PROGRESS REPORT	Project Number INS/81/006	Executing Agency UNIDO	Reporting Period 1.1-30.6,1985		
Post No.	Post Title	Name of Incumbent	Full/ Part Time	Assumed Duty (Mo/Yr) Sched. Actual (Est.)	
36.	Senior Staff of IIRD, PLMB	Mr. Abdullah Shahab	P	10-83	10-83
37.	Staff of IIRD Palembang	Ms. Fachria Asyik	P	10-83	10-83
38.	Staff of IIRD Palembang	Ms. Dewi Kusdianti	P	10-83	10-83
39.	Staff of IIRD Palembang	Ms. Harini Sukaningsih	P	10-83	10-83
40.	Translator	Mr. M. Ali	F	10-83	10-83
 <u>Post I B Talang Kelapa, South Sumatera</u>					
41.	Head of Musi Banyuasin local Ind. Office as Head of POST IB	Mr. A. Satar	P	4-84	4-84
42.	Senior Staff of IIRD as Secretary of POST IB	Mr. Abdul Maali	P	4-84	4-84
43.	Senior Staff of local Coop. Office	Mr. Masriadi	P	4-84	4-84
44.	Staff of UNSRI, Palembang	Mr. Burhan	P	4-84	4-84
45.	Staff of IIRD	Mr. A. Rivai Nawawi	P	4-84	4-84
46.	Staff of IIRD	Mr. Haryadi	P	4-84	4-84
47.	Staff of IIRD	Mr. Widdjaya	P	4-84	4-84
48.	Staff of IIRD	Mr. Zulkifli Sahar	P	4-84	4-84
49.	Staff of IIRD	Mr. M. Amin Aht.	P	4-84	4-84

UNITED NATIONS DEVELOPMENT PROGRAMME

PROJECT PROGRESS REPORT	Project Number INS/81/006	Executing Agency UNIDO	Reporting Period 1.1-30.6.1985	Annex 2 Government Project Personnel
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Post No.	Post Title	Name of Incumbent	Full/Part Time	Assumed Duty (Mo/Yr)	
				Sched.	Actual (Est.)

POST I A Palembang,
South Sumatera

50.	Head of Palembang local Industries Office as Head of POST IA.	Mr. Nursidin NS	P	4-84	4-84
51.	Senior Staff of IIRD as Secretary of POST IA	Mr. Patoni A. Gafar	P	4-84	4-84
52.	Staff of local Cooperative Office	Mr. Svasmul Bahri Muda	P	4-84	4-84
53.	Staff of local Industries Office	Mr. Zainuddin	P	4-84	4-84
54.	Staff of IIRD, Palembang	Mr. Syamsul Bahri	P	4-84	4-84
55.	Staff of IIRD, Palembang	Mr. Nuyah	P	4-84	4-84
56.	Staff of IIRD, Palembang	Mr. Neno Suwarna	P	4-84	4-84
57.	Staff of IIRD, Palembang	Ms. Arini Rasma	P	4-84	4-84
58.	Staff of IIRD, Palembang	Mr. Matdano	P	4-84	4-84
59.	Staff of IIRD, Palembang	Ms. Hifni	P	4-84	4-84

RPOT II East Kalimantan

60.	Head of IIRD Project East Kalimantan as Head of RPOT II	Mr. Svahrudin	P	4-83	4-83
61.	Senior Staff of Reg. Ind. Office	Mr. Umariansyan	P	4-83	4-83
62.	Senior Staff of Reg. Government	Mr. Husin Achuthanair	P	4-83	4-83

UNITED NATIONS DEVELOPMENT PROGRAMME

PROJECT PROGRESS REPORT	Project Number INS/81/006	Executing Agency UNIDO	Reporting Period 1.1-30.6.1985	Annex 2 Government Project Personnel
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Post No.	Post Title	Name of Incumbent	Full/Part Time	Assumed Duty (Mo/Yr)	
				Sched.	Actual (Est.)
63.	Senior Staff of Reg. Government	Mr. Djohansyah	P	4-83	4-83
64.	Head of Samarinda Mini'lity Planning Board	Mr. Razak Rahim	P	4-83	4-83
65.	Head of Kab. Kutai Planning Building	Mr. H. Rusli	P	10-83	10-83
66.	Senior Staff of Reg. Public Works Office	Mr. Syarifuddin	P	10-83	10-83
67.	Head of PERUMNAS Samarinda	Mr. F.X. Wuwigno	P	10-83	10-83
68.	Staff of Reg. Ind. Office	Ms. Asfiansvah As.	P	10-83	10-83
69.	Staff of Reg. Ind. Office	Mr. Agus Sampurna	P	10-83	10-83
70.	Staff of Reg. Ind. Office	Mr. Subagyo DS.	P	10-83	10-83
71.	Staff of Reg. Ind. Office	Mr. Ishak	P	10-83	10-83
72.	Translator	Mr. Sunarko	F	4-84	4-84

POST IIA Samarinda,
East Kalimantan

73.	Head of Samarinda Municipality Ind. Office as Head of POST IIA	Mr. Saleh Effendi	P	4-84	4-84
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UNITED NATIONS DEVELOPMENT PROGRAMME

PROJECT PROGRESS REPORT	Project Number INS/81/006	Executing Agency UNIDO	Reporting Period 1.1-30.6 1985	Annex 2 Government Project Personnel
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Post No.	Post Title	Name of Incumbent	Full/Part Time	Assumed Duty (Mo/Yr)	
				Sched.	Actual (Est.)
74.	Staff of Reg. Ind. Office as Sec. of POST IIA	Ms. Woordjani Hanet	P	4-84	4-84
75.	Head of Samarinda Muni'lity Public Works Office	Mr. Lamsyah Encok	P	4-84	4-84
76.	Head of Samarinda Muni'lity Public Works Office	Mr. S. Abdurachman	P	4-84	4-84
77.	Sen. Staff of Reg. Government	Mr. M. Ardin Yakoeb	P	4-84	4-84
78.	Sen Staff of Reg. Ind. Office	Mr. Rahadi Wikanto	P	4-84	4-84
79.	Sen. Staff of Reg. Ind. Office	Mr. Suriansyah	P	4-84	4-84
80.	Staff of Reg. Ind. Office	Mr. Molan	P	4-84	4-84
81.	Staff of Reg. Ind. Office	Mr. Djaspari	P	4-84	4-84
82.	Staff of Reg. Ind. Office	Mr. Arbani	P	4-84	4-84
RPOT III East Java					
83.	Head of Institute for Ind. R&D Surabaya as Head of RPOT II	Mr. Paribowo Sutigno	P	4-84	4-84
84.	Sen. Staff of Reg. Government	Mr. Mustakim Hadi Putro	P	10-84	10-84
85.	Sen. Staff of Reg. Government	Mr. Soedjono	P	10-84	10-84

UNITED NATIONS DEVELOPMENT PROGRAMME

PROJECT PROGRESS REPORT	Project Number INS/81/006	Executing Agency UNIDO	Reporting Period 1.1-30.6.1985	Annex 2 Government Project Personnel
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Post No.	Post Title	Name of Incumbent	Full/Part Time	Assumed Duty (Mo/Yr)	
				Sched.	Actual (Est.)
86.	Sen. Staff of Reg. Government	Mr. Soekarno	P	10-83	10-83
87.	Sen. Staff of Reg. Planning Board	Mr. Soemarjono	P	10-83	10-83
88.	Head of Reg. Public Works	Mr. Amien Roychamic	P	10-83	10-83
89.	Sen. Staff of Reg. Ind. Office	Mr. H. Soeroso	P	10-83	10-83
90.	Head of Reg. Trade Office	Mr. Utung Wasiadji	P	10-83	10-83
91.	Sen. Staff of the Reg. Dev. Bank	Mr. Soehardi	P	10-83	10-83
92.	Staff of Institute for R & D Surabaya	Mr. Sahono	P	4-83	4-83
		Mr. Widadno	P	4-83	4-83
93.	Translator	Mr. Parni P.	F	10-83	
10-831094.	Project Driver	Mr. Sunardi		F	4-84
4-84					

POST III A, Malang East Java

95.	Head of Malang local Ind. Office as Head of Post III A	Mr. Achmad Sobari	P	4-84	4-84
96.	Staff Malang local Ind. Office	Mr. Edi Mulyono	P	4-83	4-83
97.	Staff Malang local Ind. Office	Mr. Supaidi	P	4-83	4-83
98.	Staff of IIRD, Surabaya	Mr. Sarju	P	4-83	4-83
99.	Malang Reg. Gov. Sec.	Mr. A.A. Samsjoeliadi	P	4-84	4-84
100.	Malang Reg. Planning Board	Mr. H.M.O.B. Moehtadi	P	4-84	4-84

UNITED NATIONS DEVELOPMENT PROGRAMME

PROJECT PROGRESS REPORT	Project Number INS/81/006	Executing Agency UNIDO	Reporting Period 1.1-30.6.1985	Annex 2 Government Project Personnel
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Post No.	Post Title	Name of Incumbent	Full/ Part Time	Assumed Duty (Mo/Yr)	
				Sched.	Actual (Est.)
101.	Malang Reg. Planning Board	Mr. Hari Soeprapto	P	4-84	4-84
102.	Malang Reg. Coop. Office	Mr. Sungadi	P	4-84	4-84
103.	Malang Reg. Public Works Office	Mr. Soekadi	P	4-84	4-84
104.	Staff of IIRD Surabava	Mr. Surmawi Abas	P	4-84	4-84
105.	Staff Malang local Ind. Office	Mr. Gunawan	P	4-84	4-84
106.	Staff Malang local Ind. Office	Mr. Hendrata	P	4-84	4-84

Annex VI

UNIDO/UNDP PROJECT INS/81/006 - DEVELOPMENT OF BUILDING MATERIALS FOR LOW COST HOUSING

LIST OF EXPERTS

CODE	TITLE	NAME OF EXPERT	TIME SCHEDULE				
			1983	1984	1985	1986	1987
			JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND
11-01	Chief Technical Adviser	T. Ringsholt	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX				
11-02	Building Matr. Planning	B. Soederberg		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
11-03	Ind. Extension Serv.	J. Farrall		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
11-04	Field Expert I*	R. Ernst		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
11-05	Field Expert II*	P. Oudot		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
11-06	Field Expert III*	T. Bartha		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
11-50	Consultant (Dataproc)	Marc de Smet		XXXXXXXXXX			
11-50	Consultant						
11-50	Consultant						
17-01	National Team Leader	Idi Soebroto	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX				
17-02	NE-Build. Matr. Plan	L. E. Leasa		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
17-03	NE-Ind. Extens. Serv.	J.M. Simpoha		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
AsExp	Housing Constr. Tech.	Marc DeSmet	XXXXXXXXXXXXXXXXXXXXXXXXXXXX				
AsExp	Industrial Economics	Tyty Kvostila		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			

*Field Offices in Palembang (I), Samrinda (II) and Surabaya (III).

Planned
 Actual
 XXXXXXXX

DEVELOPMENT OF BUILDING MATERIALS FOR LOW-COST HOUSING
- UNIDO/JUNDP PROJECT INS/81/006 -

LIST OF DOCUMENTS		<u>GENERAL</u>	
TITLE		DATE	REMARKS
Plan of Operation	(I/E)	Nov.83	Presented to SC, several revised editions prepared to comply with SC
Regular Progress Reports for Government every 6 months	(I)		
Progress Report 1-4	(E)	Dec.83 June.84 Dec.84 Jun.85	
Internal Eval. Report	(E)	15/5-85	UNIDO Monitoring
Schedule for Execution of 5 Regional Projects (POST)	(I/E) 25p	Jan.84	The report is based on part of Plan of Operation. Agreed by SC 25/4-84. Forms basis for five prod. units. execution
Report from NPD+CTA visits to the 3 provinces	(I) 20p	Dec. 83	Basis for elaborations of SC on 25/4-84.
Reports from Investigation Teams evaluation of 5 POST sites	(I) 12+14+15p	Dec.83	-same- (One report from each region)
Information Booklet	(I/E) 16p	Mrs.84	Distributed widely for information
Project Scope	45p (I/E)	Feb.85	SC requested to approve.
Project Programme	26p (I/E)	Jul.85	Elaborated and agreed in
Project Activities	65p (I/E)	Jul.85	3 TT meetings. SC not yet approved formally.

DEVELOPMENT OF BUILDING MATERIALS FOR LOW-COST HOUSING
- UNIDO/UNDP PROJECT INS/81/006 -

LIST OF DOCUMENTS		INDUSTRY
TITLE	DATE	REMARKS
Planning Production units (PPU). (8p. E/I)	Apr. 84	Distributed to regional offices for general use.
Establishment of production units (EPU). (20p. E/I)	Apr. 84	ditto
Organization of Indonesian Government: chart and translation sheets. (3p. (I/E)	Feb. 85	For general use
Policy guidelines for the establishment and administration of a production unit. (5p. E/I)	Feb. 85	Distributed to regional offices for general use
General agreement on the use of equipment (4p. E/I)	June 85	Legal document
Economic evaluation for concrete block industry (13p. E)	Aug. 85	To be included in manual for establishment of a concrete block production unit.
Building Materials for low-cost housing in Indonesia. (10p. E/I)	Oct. 84	Brochure for Public use
Databank: Construction activities. (200p. E)	Sep. 84	For project use
Databank: Transmigration projects (70p. E)	Jan. 85	ditto
Databank: Building Materials industry. (60p. E)	Jan. 85	ditto

DEVELOPMENT OF BUILDING MATERIALS FOR LOW-COST HOUSING
- UNIDO/UNDP PROJECT INS/81/006 -

LIST OF DOCUMENTS		<u>INDUSTRY</u>
TITLE	DATE	REMARKS
Small scale bataco (cornblock) industrv. (5p. I)	May 1984	For public use
Small scale timber preservation unit for Indonesian less durable species. (8p. I)	Dec. 84	ditto
Report on Solo INS/74/34. (20p. I/E)	March 84	for discussion with RPOT.
Role of KUD in the development of building material industry for low-cost housing (46p. I)	Feb. 85	Paper for lecturing operator and supervisor for training for clay roofing tile production unit, Bandung.
Revised proposal for wood component/timber treatment production unit (32p. I)	June 84	For National Project Director/Regional Steering Committee.
An approach to the utilization of logging waste and lowgrade logs for low-cost housing (7p. I)	Dec. 84	For discussion with department of forestry.
Cashflow management for small scale industrial co- operative/KUD. (4p. I)	Feb. 85	For briefing KUD
Pricing policy for clay roofing tile (5p. I)	March 85	For discussion with RPOT/ POST
Lamtoro gung; fast growing species for building material industry for low-cost housing. (13p. I)	Sept. 85	For public use

DEVELOPMENT OF BUILDING MATERIALS FOR LOW-COST HOUSING
- UNIDO/UNDP PROJECT INS/81/006 -

LIST OF DOCUMENTS		<u>INDUSTRY</u>
TITLE	DATE	REMARKS
Report - Mission to Bandung Solo, Surabaya, Malang, Gresik, Tuban, Randublatung, Semarang. (12p. E)	Aug.85	Record of project activites.
Equipment lists and layout for clay production units (4p. E)	Feb. 84	Used to establish 4 production units
Technology Bank: coding svstem Section 3 - materials (10p. E)	Aug..85	Project use to compile appropriate info.
Equipment lists and workshop layout for wood component and timer treatment plant	Sept.85	For establishment units in Palembang and Samarinda
Equipment lists and layouts for material testing laboratories	Feb.85	For use by RPOT I, II, III.
Terms of References for Socio-Economic and Technical Survey - Malang (52p. E)	Dec.84	Survey completed by Brawijaya University
Management and operator training programme for small scale brick and tile industrv. (12p. E)	Nov.84	training completed by CRDI, Bandung
Training programme for material testing laboratory technicians. (4p. E)	Nov.84	ditto
Procedure to establish and manage a village co- operative. (chart)	March 84	For project use
News clippings/low-cost housing in Indonesia. (65p. E//50 p.1)	84-85	ditto

DEVELOPMENT OF BUILDING MATERIALS FOR LOW-COST HOUSING
- UNIDO/UNDP PROJECT INS/81/006 -

LIST OF DOCUMENTS		<u>INDUSTRY</u>
TITLE	DATE	REMARKS
Plan for follow-up pilot projects in Solo. (2p. E)	July 85	For project evaluation
Production unit financial, investment and development plan. (chart)	May 84	For use by production units
Financial flow and profit distribution - KUD (chart)	May 84	ditto
The use of plywood for constructing transmigration houses (3p.I)	Jan.85	Proposal.

DEVELOPMENT OF BUILDING MATERIALS FOR LOW-COST HOUSING
- UNIDO/UNDP PROJECT INS/81/006 -

LIST OF DOCUMENTS		<u>PLANNING /CONSTRUCTION</u>
TITLE	DATE	REMARKS
BUILDING FOR PRODUCTION UNIT Drawings (5p. E)	09/85	For direct use in Palembang.
THE CONCRETE HOLLOW BLOCK. A Technical Paper (20p. E)	08/85	Presented at Seminar-Workshop in Kathmandu 26/08 - 04-09 1985
Outline of a Chapter for the Inter-Agency Committee for Transmigration. Including a Matrix. (4p. E)	08/85	For UNDP
NR.		
1. PERUMNAS CONSTRUCTION Programme (4 sheets)	Feb. until Dec. 1984	Collected from Perumnas Head-Office, Jakarta
2. Transmigration Construction Programmes (2 sheets)		"Collected from Dept. of Transmigration Jakarta.
3. Received DATAS from BTN branch East Java (3booklets and 21 pages of construction projects by BTN developers 1983/1984)	"	BTN has no figures for future construction work, because it depends on the financial capability of respective developers.
4. Index calculations for materials use per 1, -M2 build area for computer input	"	Index are based on average figures from 4 different LCH types.
5. Visiting East Java to collect more detailed information from Perumnas and Real Estate BTN/Developers	"	See attached report

DEVELOPMENT OF BUILDING MATERIALS FOR LOW-COST HOUSING
- UNIDO/UNDP PROJECT INS/81/006 -

LIST OF DOCUMENTS		<u>PLANNING /CONSTRUCTION</u>
TITLE	DATE	REMARKS
BUILDING MATERIALS FOR LOW-COST HOUSING. Presented at the seminar on Strengthening Housing Strategy for Low-Income Urban Groups. Jakarta 7-8 February 1985. (12p. E)	7/2/85	Seminar attended by top government officials from Ministry of Works and Housing
PLYWOOD HOUSE FOR TRANSMIGRATION Including cost comparison with current standard design. (7p. E)	01/85	Discussed with Transmigration and Ministry of Forestry
THE WALK-UP FLAT. A Note for Discussion (17p.E)	06/85	Presented to PERUMNAS
THE PERUMNAS PROJECT IN SOLO. A follow-up Survey. Justification and proposal for a Questionnaire. (7p.E)	17/2/85	Discussed in detail with Insitute for Human Settlements, Bandung
PERUMNAS HOUSE TYPES. Proposal on Proposal on modified design. Including cost comparative studies. (7p. E)	09/85	Presented and discussed with PERUMNAS
The SFR System. A Brief Summary. Presented at a East Asian Regional Seminar, Jakarta 2-6 September 1985. (10p. E)	2/9/85	With recommendation on a joint effort among the participating countries to use the system.
NEWSLETTER. ISSUE NO. 1 (15p. E/I)	04/85	
NEWSLETTER. ISSUE NO. 2 (17p. E/I)	07/85	
TECHNOLOGY BANK. System for organizing professional documents (5p. E)	06/85	For internal use mainly.

DEVELOPMENT OF BUILDING MATERIALS FOR LOW-COST HOUSING
- UNIDO/UNDP PROJECT INS/81/006 -

LIST OF DOCUMENTS

PLANNING / CONSTRUCTION

TITLE	DATE	REMARKS
6. Calculating PERUMNAS and BTN House types	"	For reaching figures of Building materials index figures and Construction-Cost for Material need calculations.
7. Cost comparison calculation Perumnas against Gangnail Rooftruss construction	"	For making suggestions to decrease cost of LCH.
NR.		
1. Calculations for PROJECT SCOPE DOCUMENT, and 3 times revisions. (page - 8/A.1-5/A.2-1/A.2-2/A.3-2/A.4-5/A.4-6 A.4-7A.4-8/A.4-9/A.4-10/A.4-11/A.4-12/A.4-13/A.5-2/A.5-3/A.6-3/A.6-4/	January until September 1985	See related document.
2. Cost comparison Calculation for Conblocks - and Clay Bricks		
3. Attended Seminar on Fundamental Investigation for Housing Strategies for Urban Low Income		7 - 10 August 1985 in JAKARTA. Suggestions were made for material distribution near LCH sites.
4. Making suggestions to PERUMNAS officials for more efficient Construction methods and Site Management.		At meetings in Perumnas Head office Jakarta.
5. Articles in NEWSLETTER nr. 1 & 2		On construction aspects a) General Technology Specifications b) Improved Interim payments

ANNEX VIII

Country INDONESIA	Project Number and Amend DP/INS/91/006/F/01/37
Project Title ASSISTANCE IN THE DEVELOPMENT OF BUILDING MATERIALS SUPPLIES INDUSTRY FOR LOW-COST HOUSING	

PROJECT EXPENDITURES AS OF 30 SEPTEMBER 1985

PROJECT PERSONNEL EXPERTS POST/TITLE	TOTAL		1983		1984		1985		TOTAL EXPENDED	
	M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
11-01 CONST. IND. DEVELOPM	48.0	389,517	5.8	41,573	12.0	86,964	9.0	74,250	26.8	202,787
11-02 BUILDING MATERIALS	33.0	268,148			2.6	19,908	9.0	69,750	11.6	89,658
11-03 IND. PROMOTION.EXT.	35.0	278,540			11.3	79,495	9.0	69,750	20.3	149,245
11-04 BUILDING MATERIALS/I	24.0	185,247			5.0	33,977	9.0	69,750	14.0	103,727
11-05 BUILDING MATERIALS/II	24.0	187,506			6.0	44,406	9.0	69,750	15.0	114,156
11-06 BUILDING MATERIALS/III	24.0	178,170			11.9	84,335	9.0	69,750	20.9	154,085
11-50 SHORT-TERM CONSULTANTS	10.0	59,843			4.9	20,043	2.1	9,228	7.0	29,271
11-XX	199.0	1,547,151	5.8	41,573	53.7	369,128	56.1	432,228 3,000	106.6	842,929 3,000
13-00 ADM.SUPPORT PERSONNEL		12,000								
15-00 PROJECT TRAVEL		110,700								
16-00 OTHER PERSONNEL COSTS		24,034		2,057 4,034		24,537 3,048		20,000 0		46,594 7,082
17-01 CONSTR. IND.	30.0	39,100				8,974		8,100		17,074
17-02 BUILDING MATERIALS	30.0	38,206				8,081		8,100		16,181
17-03 IND. PROMOTION	30.0	38,206				8,081		8,100		16,181
1X-XX	289.0	1,809,397	5.8	47,664	53.7	421,849		479,528		949,041
21-00 SUBCONTRACTS		25,000				6,000		6,000		12,000

Country INDONESIA	Project Number and Amend DP/INS/81/006/F/01/37
Project Title ASSISTANCE IN THE DEVELOPMENT OF BUILDING MATERIALS SUPPLIES INDUSTRY FOR LOW-COST HOUSING	

PROJECT EXPENDITURES AS OF 30 SEPTEMBER 1985

PROJECT PERSONNEL EXPERTS POST/TITLE	TOTAL		1983		1984		1985		TOTAL EXPENDED	
	M/M	\$	M/M	\$	M/M	\$	M/M	\$	M/M	\$
31-00 INDIVIDUAL FELLOWSHIPS		90,000								
33-00 IN-SERVICE TRAINING		93,000				5,000		11,300		16,300
3X-XX		183,000				5,000		11,300		16,300
41-00 EXPENDABLE EQUIPMENT		10,392		33		2,369				2,392
42-00 NON-EXPENDABLE EQUIPMENT		490,635		71,873		180,291		11,500		263,664
48-00 ALLOTMENTS FOR PRIOR		1,027				1,027				1,027
4X-XX		500,000		71,906		181,623		11,500		265,029
51-00 SUNDRIES		41,160		1,058		12,297		7,500		20,855
T O T A L	289.0	2,558,557	5.8	120,628	53.7	626,769		515,828		1,263,225

ANNEX IX

EXPENDITURES FROM GOVERNMENT INPUT
PARTICULARLY COUNTERPART BUDGET IN AIRD MINISTRY OF INDUSTRY

BUDGET YEAR AND PROJECT CODE	TITLE OF PROGRAMME	BUDGET LINE	BUDGET	EXPENDITURES/ REALIZATION	BALANCE	REMARKS
1983-1984 15.2.13.420458.19.07.01	5. Development of local Build- ing Material Industry for Low Cost Hous- ing assisted by UNIDO INS/81/006	01	59,280,000	34,800,000	1,440,000	23,040,000 (expired)
		03	5,500,000	5,500,000		
		05	22,644,600	11,537,150	11,107,450	
		07	14,030,000	12,108,535	1,921,465	
		Subtotal		101,454,600	63,945,685	
1984/1985 15.2.03.420458.19.11.01	"	01	73,080,000	73,080,000		
		03	4,500,000	3,000,000	1,500,000	
		05	16,937,000	9,813,850	7,123,150	
		07	27,045,000	24,003,774	3,041,226	
		Subtotal		121,562,000	109,897,624	11,664,376
1985-1986 15.3.03.420458.19.11.01	"	01	84,366,000	28,122,000	56,244,000	
		03	3,000,000	-----	3,000,000	
		04	1,800,000	-----	1,800,000	
		05	12,942,000	4,000,000	8,942,000	
		07	35,450,000	6,000,000	29,450,000	
		Subtotal		137,558,000	38,122,000	99,436,000
T O T A L			360,574,600	211,955,309	125,569,291	23,040,000

Note: 01 = Personnel
03 = Materials
05 = Travel
07 = Miscellaneous

EXPENDITURES

FROM RESEARCH AND DEVELOPMENT INSTITUTES TO SUPPORT PROJECT ACTIVITIES OF INS/81/006

Name of R and D Institutes	BUDGET YEAR	BUDGET	EXPENDITURES	REMARKS
Ceramic Research and Development Institute, Bandung, Ministry of Industry	1983/1984	19,750,000	19,747,000	
	1984/1985	22,500,000	22,500,000	
	1985/1986	25,000,000	15,000,000	
	Subtotal	67,250,000	57,247,000	
Institute for Industrial Research and Development, Palembang, Ministry of Industry	1984/1985	15,000,000	15,000,000	
	1985/1986	17,000,000	9,750,000	
	Subtotal	32,500,000	24,750,000	
Institute for Industrial Research and Development, Surabaya, Ministry of Industry	1984/1985	20,000,000	20,000,000	
	1985/1986	21,500,000	10,750,000	
	Subtotal	41,500,000	30,750,000	
Institute for Industrial Research and Development establishment Project, Samarinda, Ministry of Industry	1984/1985	7,500,000	7,500,000	
	1985/1986	10,000,000	6,150,000	
	Subtotal	17,500,000	13,650,000	
	T O T A L	158,750,000	129,397,000	

PRODUCTION UNIT	PARTICIPANT	ITEM OF DONATION	IN FORM OF FINANCE	ESTIMATED VALUE OF ASSETS	REMARKS AND TOTAL VALUE
5. SAMARINDA Brick and tile Production unit	Cooperative body BIRIK project	- land 8.000m ² working capital	5,000,000	30,000,000	(invested)
		- production building - kiln	15,000,000 15,000,000		
			35,000,000	30,000,000	65,000,000
6. TENGGARONG wood preser- vation and wood Local Government component production unit	Cooperative body	- land for site		30,000,000	(planning)
		- working capital - site preparation	15,000,000 15,000,000		
	Local Government	- production building		25,000,000	
			30,000,000	55,000,000	85,000,000.
				TOTAL INVESTMENT	Rp.266,000,000
				TOTAL PLANNED	Rp.160,000,000

Annex X

LIST OF EQUIPMENT AS PER 30/9 - 1985
DP/INS/81/006

Country INDONESIA Project No. _____ Page 1 of 8

Project Title ASSISTANCE IN THE DEVELOPMENT OF BUILDING MATERIALS
AND SUPPLIES INDUSTRIES FOR LOW-COST HOUSING

HO Req. RF.	Item No.	Qty.	Unit	Description	US Dollar Equivalent	P.O./Shipping Advice Ref.	Received Qty M Y	Con- di- tion	Qty. on Hand	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) (9) (10)	(11)	(12)	(13)
79/2	1	EA	VEHICLE; TOYOTA CROWN CHASIS NO. RT132811756 ENGINE NO.: 18R1862733 REG. NO.: AB 7094 AX	6,840.-	LP	1 1 80	med. good	Installed at CPOT Jakarta transferred from DP/INS/78/001		
83/1	1	EA	KETT DIGITAL WHITENESS METER FOR Modell C - 100	2,087	15-3-1404	3 84				
93/1	1	EA	LABORATORY EQUIPMENT; SAYBORT VISCOMETER, DOUBLE UNIT 110V GONZ 1PH HAZARDOUS - CONTAINS MERCURY	4,060.-	15-3-01392	3 84				
	1	EA	STOPWATCH 0-30 SEC x 0.1 SEC. SUBSIDIARY 0-15 MIN.	52	- " -	3 84				
	19	EA	SCHMIDTIT TEST HAMPER TYPE I	1,106	- " -	3 84	good			
	20	EA	CONCRETE TEST HAMPER TYPE.N.	240	- " -	3 84				Installed at
83/1	17	EA	RAPID-HIGH TEMPERATURE FURNACE MODELL LHT 16/R	3,462	15-3-01402	5 84				CRDI
	1	EA	COMPLETE CONTROL SYSTEM	3,977	- " -	5 84				Building

Annex X

LIST OF EQUIPMENT AS PER 30/9 - 1985
DP/INS/81/006

Country INDONESIA Project No. _____ Page 2 of 8

Project Title ASSISTANCE IN THE DEVELOPMENT OF BUILDING MATERIALS
AND SUPPLIES INDUSTRIES FOR LOW-COST HOUSING

HO Req. Rf.	Item No.	Qty.	Unit	Description	US Dollar Equivalent	P.O./Shipping Advice Ref.	Received Qty M Y	Con- di- tion	Qty. on Hand	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) (9) (10)	(11)	(12)	(13)
83/1	11	1	EA	T - 6420 TITRATER	742.-	15-3-01405				
83/1	27	1	EA	STRAIN GAUGE C426	520	15-3-01408	3 84			Installed at
	28	1	EA	WATER RETENTION APP.	374	- " -	3 84			CRDI Building
83/4	2	1	EA	REX ROTARY STENCIL DUPLICATOR RR 790	802	15-3-1427				
	3	1	EA	REX ROTARY STENCIL CUTTER RR 2300	1,206.-	- " -				
83/1	8	1	EA	LABORATORY-TYPE HIGH-PRESSURE AUTOCLAVE MODEL 6982	5,708	15-3-1403	5 84			
	9	1	EA	ELCTRONIC PERMEABILITY TO AIR TESTER MODELL 7207 + CAPILLARY TUBES	4,212	- " -	5 84			
83/1	3	1	EA	DIGITAL CHEMCADET PH METER K-5984-00	293	15-3-1391	5 84			
	4	1	EA	MAGNE-4 STIRRER WITH 4 HOOT PLATES	440	- " -	5 84			
	25	1	EA	FUME HOOD 47 1/2, 115V, 9090-11	2,396	- " -	5 84			
	12	1	EA	FLASK WATER BATH 115V, 1096.00	265.13	- " -	5 84			

Annex X

LIST OF EQUIPMENT AS PER 30/9 - 1985
DP/INS/81/006

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Project Title ASSISTANCE IN THE DEVELOPMENT OF BUILDING MATERIALS
AND SUPPLIES INDUSTRIES FOR LOW-COST HOUSING

HO Req. Ref.	Item No.	Qty.	Unit	Description	US Dollar Equivalent	P.O./Shipping Advice Ref.	Received Qty M Y	Con- di- tion	Qty. on Hand	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) (9) (10)	(11)	(12)	(13)
83/1	6	1	EA	MORTAR MIXER MODEL TC-527	1,378.-	15-3-1390	5 84			Installed at
	19	9	EA	3 GANG MORTAL MOLD MODEL C-84	2,360.-	15-3-1390	5 84	good		CRDI,
	20	1	EA	CALORIMETER MODEL TC-502	1,655.-	15-3-1390	5 84			Bandung
	22	1	EA	LOS ANGELES TESTING MACHINE TC-502b	3,376	15-3-1390	5 84			
	23	1	EA	RECTANGULAR SIEVE SHAKER MODEL TS-773	5,753	15-3-1390	5 84			
	24	1	EA	VIBRATING TABLE MODEL TC-223	876	15-3-1390	5 84			
	26	1	EA	EIRICH TYPE CONCRETE MIXER TC-536a	3,529	15-3-1390	5 84			
83/3	1	2	EA	IBMM SELECTRIC - 3 TYPEWRITERS WITH 2 OPERATOR TYPING BALLS	1,385	15-3-01416		good		Installed at CPOT, Jakarta
83/1	21	1	EA	PLATINUM CRUCIBLE, TALL FORM WITH LID 30 ML.	1,688	15-3-1407	7 84			Installed at CRDI
	18	1	EA	PS MORTAR agate & PESTEL UK, 100x8mm	388	15-3-1407	7 84			Bandung
83/1	7	1	PCE	FLAME PHOTOMETER KK-217-332 COMPLETE	1,760	15-4-0289	8 84	good		

Annex X

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Project Title ASSISTANCE IN THE DEVELOPMENT OF BUILDING MATERIALS
AND SUPPLIES INDUSTRIES FOR LOW-COST HOUSING

HD Req. Ref.	Item No.	Qty.	Unit	Description	US Dollar Equivalent	P.O./Shipping Advice Ref.	Received		Con- di- tion	Qty. on Hand	Remarks
							Qty	M Y			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) (10)	(11)	(12)	(13)
	15	1	EA	CRUCIBLE FURNACE KK 226-492	3,512.-	15-4-0289	8	84			Installed at
		1	EA	TEMP. MEASURING AND IND. OUTFIT KK 266-495	294	15-4-0289	8	84			CRDI
83.1	1	1	EA	MODEL CT-306A-8 MASONRY SAW	2,995	15-4-00472	8	84			Bandung
	2	1	EA	MODEL S - 5 WATER STILL, 5GPH 110V60HZ	5,695	15-4100472	8	84			
84.5				EQUIPMENT FOR PRODUCTION UNITS FOR ROOFING TILES FROM TARUNA AND MATAHARI:							
		2	sets	EXTRUDER - COMPLETE WITH HP DESIGN ENGINE	84,807	MOD.19-4-4602			good		LP ins-
	10		sets	SCREWPRESS	incl.	19-4-4602					talled at
	10		sets	SCREPPRESS MOULDS FOR PALENTONG TILES	incl.	19-4-4602					Turen and Pakis
	2		sets	SCREWPRESS MOULD FOR RIDGE TILES (DELIVERED TO MAL IG AUGUST 1984)	incl.	19-4-4602					Villages Malang

Annex V

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Project Title ASSISTANCE IN THE DEVELOPMENT OF BUILDING MATERIALS
AND SUPPLIES INDUSTRIES FOR LOW-COST HOUSING

HO Req. Ref.	Item No.	Qty.	Unit	Description	US Dollar Equivalent	P.O./Shipping Advice Ref.	Received		Con- di- tion	Qty. on Hand	Remarks
							Qty	M Y			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) (10)	(11)	(12)	(13)
	1	set		EXTRUDER - COMPLETE WITH HP DIESEL ENGINE	incl.	19-4-4602	8	84			LP installed at Talang Kelapa Village Palembang.
	5	set		SCREWPRESS	incl.	19-4-4602					
	5	set		SCREWPRESS MOULDS FOR PALENTONG TILES	incl.	19-4-4602			good		
	1	set		SCREWPRESS MOULDS FOR RIDGE (DELIVERED TO PALEMBANG OCTOBER 1984)	incl.	19-4-4602					
	1	set		EXTRUDER - COMPLETE WITH HP	incl.	19-4-4602					LP
	5	set		SCREWPRESS	incl.	19-4-4602					LP installed
	5	set		SCREWPRESS MOULDS FOR RIDGE TILES (DELIVERED TO SAMARINDA NOVEMBER 1984)	incl.	19-4-4602			good		Samarinda. LP
	1	EA		APPLE IIE COMPUTER COMPLETE	4,805	MOD.19-4-4523			good		LP installed at CPOT, Jakarta

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Project Title ASSISTANCE IN THE DEVELOPMENT OF BUILDING MATERIALS
AND SUPPLIES INDUSTRIES FOR LOW-COST HOUSING

HO Req. Rf.	Item No.	Qty.	Unit	Description	US Dollar Equivalent	P.O./Shipping Advice Ref.	Received			Con- di- tion	Qty. on Hand	Remarks
							Qty	M	Y			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
84/1	1	EA		VEHICLE: TOYOTA COROLLA 1300 SEDAN/AIRCOND. CHASSIS NO.: KE70-9143540 ENGINE NO.: 4K-6175912 REG. NO.:	5,833.-	MOD.19-4-4516				good		LP installed at CPOT, Jakarta
	2	EA		VEHICLES: VW CIMBI/AIRCOND. CHASSIS NOS.: ENGINE NOS.: REG NOS.:	17,314	19-4-4516				good		LP installed at CPOT, Jakarta and RPOT III Surabaya
84/4	1	EA		VEHICLE: TOYOTA LANDCRUISER HARDTOP ENGINE BJ40RV-KC CHASSIS NO.: ENGINE NO.: REG/ NO/:	8,778.-	MOD.19-4-4595						installed at RPOT III, SAMARINDA. LP
84/6	3	EA		SHARP PHOTOCOPIERS MODEL 760	4,590.-	MOD.19-4-4605				good		LP one each installed at 3 RPOT's

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Project Title ASSISTANCE IN THE DEVELOPMENT OF BUILDING MATERIALS
AND SUPPLIES INDUSTRIES FOR LOW-COST HOUSING

HO Req. Ref.	Item No.	Qty.	Unit	Description	US Dollar Equivalent	P.O./Shipping Advice Ref.	Received Qty M Y	Con- di- tion	Qty. on Hand	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) (9) (10)	(11)	(12)	(13)
83/1	13	1		KITAGAWA GAS DETECTOR	364.-	15 - 3 - c. 1406		good		installed CRDI, Bandung
		3	sets	MATERIALS TESTING EQUIPMENT	23,700	15- 4 - C.0850	12 84	good		one set each installed at the 3 RPOT's
		1		NATIONAL KEY TELEPHONE SYSTEM	3,284,07.-	MOD.19-3-04 UV. P	2 84	good		installed CPOT, Jakarta
		1		NATIONAL AIR CONDITIONER	365.72	MOD.13-4-3240	3 84	good		installed CPOT, Jakarta
		3	sets	LOCALLY PRODUCED TESTING EQUIPMENT	2,500	LP		good		One set each ins- talled at the 3 RPOT

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AND SUPPLIES INDUSTRIES FOR LOW-COST HOUSING

HO Req. Rf.	Item No.	Qty.	Unit	Description	US Dollar Equivalent	P.G./Shipping Advice Ref.	Received Qty M Y	Con- di- tion	Qty. on Hand	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) (9) (10)	(11)	(12)	(13)
	1			VIDEO EQUIPMENT	4,000.-	LP		good		installed CPOT, Jakarta
	2			20RA BRICK MACHINES	7,200	Hq. P		-		Under delivery