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Industrial Development Board

Fourth Session

Vienna, 20 - 30 April 1970

Agenda item 5(a) and (b)

PROGRAMME OF WORK FOR 1971 INCLUDING REPORT OF ACTIVITIES

FOR 1969 AND UPDATING OF 1970 PROGRAMME

PART TWO

Group 6 : Light Industries

id.70-323 We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche.

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Documents ID/B/64/Add.l-15 contain a detailed description of the fifteen groups of activities of UNIDO for the years 1969 to 1971. A list of these fifteen groups appears in the preface to document ID/B/64.

The material in each addendum is organized as follows:

Introduction

- A. Operational Activities
- B. Supporting Activities

Section A on <u>Operational Activities</u> lists the field projects by technical assistance programmes (UNDP/SF, UNDP/TA, RP and SIS). Under each programme appears a detailed description of the projects approved as of 30 September 1959 and a forecast of new projects. The list of approved projects is followed by a summary of expenditures. Projects that have been completed in 1969 (barring possible extension) are indicated by an asterisk.

Section B on <u>Supporting Activities</u> is divided into "projects" corresponding to major areas of work, each project being subdivided into "components". Under each component, details of expenditure are given for the following items: staff man/months, meetings and consultants. The priorities A and B, under which components are listed, apply to the programmed activities in 1970 and 1971, priority B indicating that implementation is subject to availability of funds. Unless otherwise indicated, expenditures on supporting activities are financed from the UNIDO Regular Budget. Because of the nature of the item, expenditures on publications are listed separately in this section. Finally, the section contains summary tables of expenditures on supporting activities by sources of funds for 1969, 1970 and 1971.

INTRODUCTION

1. Assistance to developing countries in promoting the development of their light industries is one of the major activities of UNIDO as such industries contribute to substitution of imports, increase labour productivity and improve the standard of living of the population.

2. The programme of operational and supporting activities of UNIDO aims at establishing or modernizing the processing industries in developing countries, according to current economic and technical requirements, through selection of the most appropriate equipment and techniques and improvement and better use of local raw materials.

3. As can be seen from the technical assistance projects carried out by UNIDO in 1968 and 1969 and those proposed for 1970, the main fields of activities in the area of food processing are the following:

General planning aimed at defining priorities for the development of the food industry; Establishment or modernization of vegetable oil processing and animal feedstuff plants; Research in food processing technology; Establishment of cassava processing plants; Development of the milling industry (sorghum, millet and rice); Agro-industrial development; Development of meat processing industry; Development of sugar industry.

4. The basic considerations in selecting the supporting activities have been: the results of technical assistance projects implemented by UNIDO, the availability of the necessary expertise and the limitations in resources available to developing countries.

5. There is considerable interaction between operational and supporting activities. As an example, the second interregional workshop on textile industries may be mentioned, which is being planned on the basis of findings of UNIDO field experts who have been active in the textile industry in some ten developing countries.

, **A** (A)

6. In the textile industry, UNIDO will continue to develop guidelines for the selection of the most suitable production lines and equipment and of the most adequate new material combinations. It will also recommend means of better quality control and methods of successful management of textile plants.

7. In the food processing sector, UNIDO will assist in the development of better techniques and technologies in the production and industrialization of staple foods (carbohydrates, oils and fats). UNIDO will also concentrate its efforts on large-scale industrial production of vegetable and animal protein, in order to better utilize conventional protein foods and to develop new sources.

8. In the wood processing sector, the work programme covers modernization and establishment of industries for the manufacture of furniture, joinery, particle boards and components for prefabricated wooden houses from indigenous forestry resources and agricultural wastes. In the supporting programme, consideration has been given to the findings reported by some thirty UNIDO field experts active in this sector. For example, the planning for the 1971 seminar on furniture and other secondary wood processing industries is based on recommendations of UNIDO experts in eleven countries.

9. In the leather sector, modern methods of tanning and pre-tanning and appropriate use of local raw material comprise the main portion of the programme. Special attention will be given to problems of leather and leather goods export possibilities through improved quality and design and competitive prices.

10. In keeping with the recommendations of UNIDO field experts, attention will be given to the modern trends of integrating processing lines embracing production of raw material, processing of raw material and semi-products, and the distribution of the final goods. Co-operation is being maintained with FAO as regards problems of raw material supply and control of the edible goods.

A. OPERATIONAL ACTIVITIES

UNDP/SPECIAL FUND - approved projects

Project number

AFRICA

United Arab Republic

UAR-62 Textile quality control centre, Alexandria

Purpose: To assist the Government in developing the existing laboratories of the textile consolidation fund in Alexandria into a textile quality control centre. The plan of operation is being drafted, and a project manager is under recruitment.

Approved:	June 1969	UNCP:	\$ 745,400
Duration:	4 years		800,000

THE AMERICAS

Uruguay

URU-12 Productivity centre

Purpose: To provide expert services for the textile and shoe industries. ILO is the executing agency.

Approved:	January 1969	UNDP:	}	407,700
Duration:	2 <mark>2</mark> years	Govit:	5	429,000

EUROPE AND THE MIDDLE EAST

Turkey

TUR-30 Central research and training institute for hides, skins and leather, Istanbul

Purpose: To assist in the implementation of this project, for which FAO is the executing agency.

Approved:	June 1969	UNDP:	\$ 978,800
Duration:	5 years		926.000

UNDP/SPECIAL FUND - approved projects (cont'd)

Project number

> EUROPE AND THE MIDDLE EAST (cont'd)

Yugoslavia

YUG-10 Development of forestry and forest industries

Purpose: To provide experts in quality control, integration and mechanization of forest and forest industry enterprises, and marketing. FAO is the executing agency.

Approved:	January 1969	UNDP:	- \$	983,200
Duration:	3 years	Gov 't :	\$1	,331,000

Table 1

Estimated expenditures for approved UNDP/SF projects, 1969-1971 (in US dollars)

		1969		1970			1971			
	Experts	Fellows	<u>Other</u> ^{a/}	Experts	Fellows	Other ^{a/}	Experts	Fellows	Other ^a /	
UAR-62	2,000	-	-	50,400	21,800	88,000	100,800	20,400	101,100	
TUR-30	-	-	-	-	-	-	-	-	-	
YUG-10	•	-	-	•	-	-	-	-	-	
URU-12	•	•	*= 	48,000		•	*	•	•	
To ta 1	2,000	-	-	98,400	21,800	88,000	100,800	20,400	101,100	

a/ Including equipment and subcontracting.

UNDP/SPECIAL FUND - projects submitted to UNDP for approval

Project number

AFRICA

Morocco

NOR-33 Fish protein concentrate

Purpose: To assist the Government in determining whether fish protein concentrate (FPC) can be produced economically, taking into account concurrent studies of potential markets. Project activities will include preparation of plans to improve present transport and handling procedures, market studies, feasibility studies, and if appropriate, engineering studies for a FPC plant.

Duration:	1 year	Est. UNDP: Est. Govit:	
Durationi	1 year		

ASIA AND THE FAR EAST

Indonesia

Textile industry rehabilitation and development programme

Purpose: To assist in the implementation of a rehabilitation and development programme for the textile industry through the provision of expert services, training fellowships and laboratory equipment to attain utilisation of full capacity by restructuring production and increasing efficiency.

Duration: 32 year	21	Est.	UNDP:	8	789,000
	No leave	Est.	Govtt:	- \$	705,000

Mongolia

NON-6

Establishment of an applied research and experimental centre for the leather and leather goods industry at Ulan Bator

Purpose: To assist in the creation of a centralised base for research work in the field of production of leather and leather goods to improve the quantity and quality of output.

Sunski and	3	Net. UNDP:	\$ 957,500
Duration:	2 Josta	Not. Govit:	\$1,786,000

UNDP/SPECIAL FUND - projects under preparation

AFRICA

Assistance to the leather industry

ASIA AND THE FAR EAST

Leather goods development

Nodern wool-dyeing and finishing plant

Re-organisation and development of the textile industry

UNDP/TECHNICAL ASSISTANCE - approved projects

Pro ject	1969	1970	1971
Project number	(im	UB dolla	re)

AFRICA

Sudan

SUD-69-5	Veretable oil processing the Ministry of Commerce	- apsistance to and Supply"			
	expert	· 1/8 m/m	15,400	-	-
SUD-69- 7	Operation of ginning fac	tories"			
	fellow	1/4 m/m	2,075	-	-
	United	Arab Republic			
UAR-68-12	Tin lithographing and ve	mishing			
	expert	1/3 m/m	-	6,000	-
UAR-69-1	Catgut manufacturing				
	expert	1/6 m/m	-	12,000	•

1/6 m/m -2/12 m/m 6,800 expert 12,000 fellows

THE ADERICAS

Argentine

ARG-68-6	Assistance to the National	Institute for			
	Industrial Technology (1)	[] - malylical			
	techniques for the control)		
	industrial processing of a				
	ducts and textile quality	control.			
		s/20 -/-	3.860	20,000	18.000

experte	<u> 5/ 20</u>	n/	3,070	20,000	13,000
fellow	5/20 1/6	n/n	3,400	-	•

Heiti

NAI-68-8	Appintance to expential	oils and fate			
	production (chemical end to the IMI (Institut de	(neer) - accistanc	•		
	Agricele et Industriel)				
	expert	1/11 m/m	9,625	12,000	•

UNDP/TECHNICAL 'SSISTANCE - approved projects (cont'd)

Project number

1969 1970 1971

(in US dollars)

ASIA AND THE FAR EAST

Indonesia

INS-69-31 Industrial development expert 1/12 m/m - 24,000 -

Irea

IRA-68-28 Development of the food industry feasibility studies (assistance to the Ministry of Economy) expert 1/18 m/m 23,100 12,000 -

Malaysia

MAL-68-6 <u>Assistance to MARA - trust council ror</u> <u>promotion of indigenous enterprises</u> (leather processing and footwear manufacturing) experts 2/48 m/m 46,200 48,000 -

Noncolia

MON-68-8	Technological development of the leather goods industry					
	experts fellows equipment	2/14 m/m 2/6 m/m	21,175 4,400 2,000	6,000 - -	-	

MON-69-2 <u>Assistance to meat and milk industry</u> experts 2/4 m/m - 8,000 -

Pakistan

- PAK-69-9 Assistance to wood penel industry particle and fibreboard production, wood-based penel production and marketing
 - experts 3/12 m/m 5,775 18,000 -

UNDP/TECHNICAL ASSISTANCE - approved projects (cont'd)

<u>1969 1970 1971</u>

(in US dollars)

EUROPE AND THE MIDDLE EAST

Project number

1. ...

Bulgaria

BUL-69-1 0	Application of synthet in the knitting fabric	tio fibres and silks industry*			
	fellow	1/5 m/m	3,000	-	-
BUL-69-20	Assistance to furnitur	re industry*			
	expert	1/1 m/m	1,925	-	-
BUL-69-43	Production of mattresses, upholstered and kitchen furmiture"				
	íellows	2/8 m./m	5,200	-	-
	Car	choslovakia			
CTR_60_0	Omtimel stillention of				

materials" - chemica		extile rew			
fellows	2/2	2 m/m	2,800	-	-

Hungary

HUTH-69 -2	Technical development of the knitting industry					
	fellows	3/9 m/m	2,200	2,200	2,200	

MUN-69-3 Technical development of household textiles fellows 3/9 m/m 2,200 2,200 2,200

Poland

POL6914	Assistance to the furn - production of solid	<u>iture industry</u> " wooden furmiture				
	fellow	1/3 m/m	1,200	-	-	
POL-69-29	Assistance to textile and leather industry"					
	fellows	4/19 m/n	12,400	•	-	

UNDP/TECHNICAL ASSISTANCE - approved projects (cont'd)

Estimated expendi		able 2		moienta	1 060_1 0	171
Estimated expendi				70	<u> </u>	
	m/m	US\$	m/m	US\$	m/m	US\$
Experts	12/63	122,250	18/86	166,000	3/8	16,000
Fellows	24/92	50,475	2/6	4,400	2/6	4,400
Other	-	2,000	-	-	-	-
Total		174,725		170,400		20,400

UNDP/TECHNICAL ASSISTANCE - forecast of new projects for 1971

	Experts m/m	Fellows m/m	Other USS
AFRICA	<u> </u>	<u></u>	<u></u>
Assistance in improving production control methods in the local textile mills	1/12	_	-
Assistance to the dyeing and finishing industry	1/12	-	-
Feasibility of cotton yarn manufacture for export	1/3	-	-
Assistance in increasing the productivity of the existing textile mills	2/24	-	-
Assistance to the blanket industry (productivity, organization, product development)	2/12	_	-
Assistance in establishing local textile industry	1/12	-	-
Rehabilitation of the textile industry	1/12	-	-
Corn industry development; canning industry development	3/18	1/6	-
Soya protein foods development	2/6	2/6	-
Cassava processing industry	3/18	-	-
Canning food industry	1/6	-	-
Fish processing industry	4/42	-	-
Development of the soluble coffee processing industry	2/6	1/6	-
Development of the vegetable oil and feedstuff industry	9/78	-	-

UNDP/TECHNICAL ASSISTANCE - forecast of new projects for 1971 (cont'd)

	Experts m/m	Fellows m/m	Other US\$
AFRICA (cont'd)			
Development of the meat processing industry	7/36	1/6	-
Development of the vegetable and fruit processing industry	4/30	2/6	-
Development of the fruit processing industry	2/12	-	-
Development of sorghum milling	3/12	1/6	-
Development of the citrus fruit processing industry	1/12	-	-
Development of the milling industry	4/30	-	-
Assistance to the biscuit factories	1/12	-	-
Research activities on food processing	2/12	3/18	-
Development of banana powder production	2/12	1/6	-
Development of rice processing industry	2/6	1/6	-
Development of tuna fish processing	2/12	-	-
Fish protein concentrate production	3/12	2/12	-
Agro-industry development	2/12	-	-
Animal and vegetable protein production	3/6	3/18	-
Assistance to the leather footwear industry	2/12	_	-
Assistance to the leather industry	7/42	-	-
Assistance in the hides, skins and leather field	2/12	-	-
Assistance in hides and skins improvement and marketing	1/6	-	-
Feasibility study for a joinery and/or furniture factory	1/6	-	-
Production of wooden carts and wheels	1/6		-
Particle board from agricultural wastes	3/18	-	-
Feasibility study for production of particle board from esparto grass	2/10	-	-
Assistance to the cork processing industry	2/12	4/24	-
Assistance to the wood processing industry	1/6	-	-
Assistance to the new fibreboard industry	1/6	2/12	-

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UNDP/TECHNICAL ASSISTANCE - forecast of new projects for 1971 (cont'd)

ن <u>مر</u>	TECHNICAL ASSISTANCE - INTECASE OF NEW Pro	Experts	Fellows	<u>Other</u>
		<u>m/m</u>	<u>m/m</u>	US\$
THE	AMERICAS			
	Development of ramie as a blend fibre	1/12	-	-
	Textile industry reorganization and development programme	3/12	-	_
	Assistance to individual textile mills in increasing their productivity	5/36	-	_
	Assistance in establishing new local textile industry	1/12	-	_
	Fish processing industry	6/48	3/18	-
	Protein production development	4/24	3/18	-
	Assistance to the food industry development	t 6/48	6/36	-
	Food processing research	11/48	12/72	-
	Dairy industry	2/18	-	-
	Coconut processing development	1/2	~	-
	Vegetable oil and feedstuff	3/24	2/12	-
	Vegetable and fruit processing	8/54	2/12	-
	Soya protein development	5/24	7/42	-
	Tuna fish processing	2/12	2/12	-
	Banana powder development	4/24	2/12	-
	Cassava industry	2/12	-	-
	Meat processing industry development	6/36	2/12	-
	Export oriented food industry	3/18	1/6	-
	Assistance to the woodworking industry	4/20	2/12	-
	Assistance in the establishment of a flax board industry	1/6	-	_
	Development of the furniture industry	2/12	-	-
	Assistance to the hides and skins and leather industries	6/36	-	-
	Assistance to the footwear industry regarding export possibilities	3/18	-	-
ASIA	AND THE FAR EAST			
	Wool dyeing and finishing project	1/12	**	-
	Assistance to individual cotton mills	1/12	-	
	ABBISTANCE to individual cotton mills	1/12	-	

UNDP/TECHNICAL ASSISTANCE - forecast of new pro	jects for	<u>1971</u> (con-	t'a)
	Experts m/m	Fellows m/m	Other USS
ASIA AND THE FAR EAST (cont'd)			
Feasibility of establishing a spinning mill for fine-count cotton/polyester	2/1 2	-	-
Rice processing industry	14/78	6/36	-
Agar-agar industry development	1/6	-	-
Development of food technology on food industry research	3/24	4/24	-
Soya protein industry	9/54	9/54	-
Vegetable oil processing	4/24	-	-
Development of coconut processing	2/12	4/24	-
Fruit and vegetable processing	8/42	2/12	-
Feasibility study for a prefabricated housing factory	2/1 2	_	-
Assistance to the furniture inlustry	1/6	1/6	-
Assistance to the wood processing industry	2/8	-	-
Feasibility study for a plant for industrial production of low-cost wooden houses	2/1 2	_	_
Assistance in the hides, skins and			
leather field	4/24	-	-
Assistance to the footwear industry	2/12	-	
EUROPE AND THE MIDDLE EAST			
Establishment of local textile manufacturing - feasibility studies	2/12	-	-
Assistance to the textile industry	1/12	-	-
Quality control in the knitting industry	1/6	-	-
Development of the fruit and vegetable processing industry	3/12	2/12	-
Food processing research	3/18	4/24	-
Fish processing development	3/18	-	-
Vegetable oil development	2/12	-	-
Planning of food industry development	2/12	-	-
Sugar processing from dates	2/12	-	-
Assistance to the fibreboard industry	2/12	2/12	-
Assistance for tannery and leather goods	1/6	.	-
Assistance to the leather industry	1/6	1/4	-

UNIDO REGULAR PROGRAMME - approved projects

Project number			<u>1969</u> (in US	<u>1970</u> 3 dollars)
indin 001	AFRICA			
	Alge	eria		
RP-06-2	Food and light industries - techniques	milling		
	expert fellows	1/6 m/m 2/12 m/m	-	18,350
	Burn	undi		
RP-06-2	Food and light industries - tobacco processing	food and		
	fellows	2/12 m/m	-	7,200
	Central Afric	an Republic		
RP-06-2	Food and light industries - production of food stuffs	cassava processing,		
	fellows	2/9 m/m	-	5 ,60 0
	Che	ad		
RP-06-3	Food and light industries - techniques	modern milling		
	fellow	1/6 m/m	-	3,400
	Ivory	Coast		
RP-06-2	Food and light industries -	agro-industrial train	ing	
	fellow	1/6 m/m	-	3,400
	Ker	<u>aya</u>		
RP-06-2	Food and light industries - of corn processing	modern techniques of		
	fellow	1/6 m/m	-	3,400

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			ID/B/64 Page 17	
UNIDO REGUI	LAR PROGRAMME - approved pro	ojects (cont'd)		
Project number			<u>1969</u> (in US	<u>1970</u> dollars)
	AFRICA (cont'd)	rescar		
RP-06-3	Food and light industries training			
	fellow	1/3 m/m	-	2,200
	<u>1</u>	Kali		
RP-06-2	Food and light industries training	- agro-industrial		
	fellows	2/12 m/m	-	6,800
	Neur	itania		
RP-06-2	Food and light industries food industries	- new techniques in		
	fellows	2/12 m/m	-	6,800
	Nau	ritius		
RP-06-2	Food and light industries industries	- fish processing		
	fellows	1/6 m/m	-	3,400
	Ĭ	igeria		
RP-06-3	Food and light industries fellow	- refrigeration technique 1/6 m/m	8	3,400
			-	5,400
RP-06- 3	Food and light industries	- fruit and vegetable		X
M -00-5	processing, tea processin	6		10.000
RP-06-3 0	fellows	3/18 m/m	-	10,200
<u> WL=AA=2A</u>	Light industries* - leath fellow	1/12 m/m	5,800	-

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UNIDO REGULAR PROGRAMME - approved projects (cont'd)

Project			<u>1969 1970</u>
number			(in US dollars)
			(
	AFRICA (cont'd)		
	Sen	egal	
RP- 06-2	Food and light industries industrial processing	- animal products,	
	fellow	1/6 m/m	- 3,400
	Som	alia	
RP-06- 3	Road and light industrias	a maa du duu duu da 1	
M =00= 3	Food and light industries training	- agro-industriai	
	fellow	1/6 m/m	- 3,400
	Sud	an	
RP-06- 3	Food and light industries	- oil seed industries	
	fellow	1/6 m/m	- 3,400
RP-06-34	Food industries* - food che	emist	
	expert	1/4 m/m	7,800 -
	Te	ogo	
RP-06- 3	Food and light industries - agro-industrial training	- cassava production,	
	fellows	2/12 m/m	- 7,200
	Tun	isia	
RP- 06-2	Food and light industries -		ines
	fellow	1/6 m/m	- 11,550
	Uga	lda	
RP-06-2	Food and light industries - from soya bean	- production of protein	n
	•		
	fellows	2/12 m/m	- 6,800

UNIDO REGULAR	PROGRAMME - approved projects	(cont'd)

Project number		<u>1969 1970</u> (in US dollars)
	AFRICA (cont'd)	
	United Republic of Tansania	
RP-06-4 0	Light industries* - tertile industry	
	fellow 1/6 m/m	3,400 -

Upper Volta

RP-06-2		<u>ries</u> - agro-industrial		
		sing, feasibility studies		
	for food industry			
	expert	1/3 2/12	-	5,775
	fellows	2/12	-	7,200

Regional

RP-06-9	Food and light industries - regional adviser, mechanical forest industries			
	expert	1/12 m/m	-	2 4,50 0
RP-06-126	Mechanical forest industries* - regional adviser, secretariat assistance			
	expert	1/12 m/m	27,000	
RP-06-1 53	Food industries (OCA	N)* - meat marketing		
	expert	1/3 m/m	6,000	•

THE AMERICAS

Argentina

RP-06-3	Food industries - preservation	- advanced techniques of food		
	fellows	2/12 m/m	-	6,800

Barbados

RP-06-2	Food industries -	food processing		
	fellow	1/3 m/m	-	2,200

UNIDO REGULAR PROGRAMME - approved projects (cont'd)

Project number			<u>1969</u> <u>1970</u> (in US dollar	-
	THE AMERICAS (cont'd)			
	Braz	<u>;i1</u>		
RP-06-3	Food and light industries - tropical fruit industry, ag training	development of ro-industrial		
	fellows	3/18 m/m	- 10,200)
	Dominican	Republic		
RP-06-93	Light industry* - food proc	essing		
	fellow	1/12 m/m	5,800 -	
	Ecua	dor		
RP-06-3	3 <u>Food and light industries</u> - technology and cold storage (refrigeration) in fish industry, development of textile industry			
	fellows	2/12 m/m	- 7,200	I
	Guya	ina		
RP-06-2	Food and light industries -	food processing		
	fellow	2/12 m/m	- б ,8 00	1
RP- 06-97	Light industries* - managem wood industrial processing	ent food processing,		
	fellows	2/10 m/m	6,000 -	
	Parag	Lev		
RP- 06-4	Food and light industries - processing technology	tropical fruit		
	fellows	2/12 m/m	- 6,800	
	P	Tu		
RP- 06-2	Food and light industries - production	fish protein concentr	ate	
	fellows	2/12 m/m	- 6,800	
•				

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UNIDO RECULAR PROGRAMME - approved projects (cont'd)

<u>1969 1970</u> (in UE dollare)

Project number

THE AMERICAS (cont'd)

Trinidad and Tobago

RP-06-2	Food and light indust: development			
	fellow	1/6 m/m	-	3,400

UTHERAY

RP-06-3	Food and light industries - meat preservation			
	fellows	2/15 4/8	•	9,200
RP-06-106	Light industries* - foo	d processing		

expert 1/6 m/m 12,400 -

ASIA AND THE

Antes

RP-06-2	Pood and light industr of rice processing, pr soys beam			
	fellow	3/15 m/m	•	9,000

Cambedia

XP-06-2	Pred and light industries	- rice proceesing		
	follow	2/12 m/m	•	6,800

India

HP-06-5	Pool and light industries -	- rice proceeding		
	fellow	3/34 n/n	•	17,400
	agro-industrial training			
	follow	3/21 m/m	•	13,800

120

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UNIDO REGULAR PROGRAMME - approved projects (cont'd)

Project number			<u>1969 1970</u> (in UE dellare)
	ASIA AND THE FAR EAST (cont'd)		
		Iree	
RP-06- 7	Pood and light industries in agro-industrial comple	- food processing	
	fellow	1/6 m/m	- 3,400
		Leos	
RP-06-2	Pood and light industries advisor		•
	expert	1/8 m/m	- 15,400
RP-06-64	Food and light industries	- feasibility studies	
	expert	1/6 m/ 1	11,800 -
	Nor	<u>wolia</u>	
RF-06-6 7	Food and light industries	- fur production	
	fellows	2/12 m/m	6,800 -
	Food industries		
	fellows	2/12 m/m	6,800 -
	Ĩ	epal	
RP-06-4	Food and light industries	- wood processing	

	fellow	1/6 m/m	-	3,400
RP-06-69	Pood and light industr	ios* - wood processing		
	fellow	1/4 m/m	2,600	-
	ootton industy		·	
	fellow	1/4 m/m	2,600	•

6,800

UHIDO RECULAR PROGRAMME - approved projects (cont'd)

Project	
number	

<u>1969</u> <u>1970</u> (in US dollars)

ASIA AND THE PAR EAST (sont'd)

Pakistan

RP-06- 71	Food and light industrie fellows	ng* - food processing 2/12 m/m	r 6,800		
		-//-	0,000	-	
	Phi	lippines			
NP-06- 3	Food and light industries - production of irradiated plastic impregnated soft wood				
	fellow	1/3 m/m	- .	2,200	
	vegetable oil processing	5			
	fellows	2/12 m/m	-	6,800	
	Personal practice on sic				

research practice on rice processing (bran oil extraction) fellows 2/12 m/m -

Theiland

MP-06-142	Pool and light industries"	tries" - textile industries		
	fellow	1/6 m/m	3,400	-

Megionel

NP-06- 7	<u>Prod and light industries</u> - oils and fats industries				
	expert	1/12 m/m	-	24,500	
NP-06-1 0	Food and light indust: ongineering	ties - rice processing			
	e.spert	1/12 m/m	-	24,500	
W-06-83	Pool and light indust:	ies* - oils and fate			

emperi 1/12 m/m 23,600 -

UNIDO REGULAR PROGRAMME - approved projects (cont'd)

Project number		<u>1969</u> <u>1970</u> (in US dollars)
	EUROPE AND THE	

MIDDLE EAST

Israel

RP-06-3	Food and light industries industries	- leather	processing		
	fellow	1/3	m/m	-	2,200

Malta

RP-06-117 Light industry* expert

-

1/3 **m/**m

6,200 -

Т	ab	10	3

Estimated	expenditures	for approved H	P projects,	1 969-19 70
		1969	19	70
	<u>m/m</u>	US\$	m/m	US\$
Experts	7/34	96,800	6/59	106,675
Fellows	14/87	50,000	65/413	236,300
Other	-	100	-	-
Tota	1	146,900		342,975

UNIDO REGULAR PROGRAMME - forecast of new projects for 1971

	Experts m/m	Fellows R/R
AFRICA		
Cork processing	-	1/6
Milling techniques	-	4/20
Agro-industrial training	-	7/35
Wooden carts and wheels production	-	1/12

UNIDO REGULAR PROGRADE - forecast of new projects for 1971

	Experts	Fellows
AFRICA (oont'd)	<u>n/n</u>	<u>m/m</u>
Particle board production	-	1/6
Leather production	-	, 11/62
Corn industry	-	1/6
Rice processing	-	1/6
Tuna fish processing	-	1/6
Textile production	-	5/30
Joinery and furniture	_	2/6
Wood processing	-	1/6
Corn industry development	-	2/8
THE AMERICAS		
Leather production	-	4/16
Vegetable cil production	-	2/8
Footwear industry	-	1/6
Flax board industry	-	1/6
Food processing	-	1/6
Agro-industrial development	-	1/6
Leather processing	-	4/16
ASIA AND THE FAR EAST	ŕ	, ,
Leather processing	•	1/6
Agro-industrial development	-	4/24
Furniture industry	1/6	4/24
Rice processing		2/12
Regional adviser, rice processing		·
engineering	1/12	. 🗕

UNIDO REGULAR PROGRAMME - forecast of new projects for 1971 (cont'd)

		<u>Experts</u>	Fellows m/m
ASIA AND TH	E FAR EAST (cont'd)		
Region indust	al adviser, oils and fats ries	1/12	-
EUROPE AND	THE MIDDLE EAST		
Food p	rocessing	-	1/3
Textil	e industries	`_	2/12
SPECIAL IND	USTRIAL SERVICE - approved projects		
Project number		<u>1969</u> (in US	<u>1970</u> dollars)
	AFRICA		
	Algeria		
67/85 Alg-2	Assistance in the reactivation of the Cob factory ("Biscuiterie de l'Algérois") - au to the general manager	iscal dviser	
	expert 1/12 m/m	13,000	13,000
69/559 Alg-9	Assistance to the Société National des Lid - cork processing specialist	lgos	
	expert 1/6 m/m	-	12,000
	Burundi		
68/411 BDI-1	Feasibility study on the establishment of tobacco processing industry - marketing a processing		
	experts 2/4 m/m	4,000	4,000
68/412 HDI-3	Assistance for the establishment of a mil industry	ling	
	oonsulting firm	7,500	7,500

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SPECIAL INDUSTRIAL SERVICES - approved projects (cont'd)

Project		<u>1969</u>	<u>1970</u>
number		(in US de	oll ars)
	AFRICA (cont'd)		
	<u>Burundi</u> (cont'd)		
68/413	Feasibility study for a particle board plant*		
BDI-4	consulting firm	23,600	-
69/617 BDI-7	Study of possibilities for manufacture of bags from local fibres - for coffee and other agricultural products		
	expert 1/2 m/m	-	4,000
	Central African Republic		
68/351	Feasibility study for cassava industrializati	<u>on</u> *	
CAF -6	- food technologist expert 1/3 m/m	6 000	
	- , - ,	6,200	-
68/362 C AF- 2	Assistance to a plywood mill in Lobaye region - wood technologist/mechanical engineer, industrial finance adviser	₩	
	experts 2/4 m/m	8,000	-
68/380 C AF- 4	Assessment of the possibilities of establishi medicinal plants and essential cils industry - chemical engineer/industrial chemist	ng	
	expert 1/6 m/m	10,000	1,000
	Chad		
68/349 CHD-1	Assistance to the Société des Industries de la Viande du Tohad - meat technologist		
	expert 1/3 m/m	6,200	-
	Congo (Brazsaville)		
67/151 CON(B)-1	Assistance to the vegetable oil industry - palm oil extraction and refining specialist	i	
	expert 1/4 m/m	-	9,000
67/171 COW(B)-3	Pre-investment study for the establishment of a pineapple canning industry*) P	
	expert 1/2 m/m	5,000	-

SPECIAL INDUSTRIAL SERVICES - approved projects (cont'd)

<u>1969</u> <u>1970</u> (in US dollars)

Project number

AFRICA (cont'd)

Dahomey

69/611	Assistance in the develop	oment of the cashew		
DAH-3	nut processing industry -	· industrial production		
	adviser			
	expert	1/0.25 m/m	1,000	-

Ethiopia

67/141	Assistance for improving				
ETH-3	and skins to meet leather	r industry specificati	ons*		
	- marketing specialist				
	expert	1/6 m/m	11,500	-	
	equipment	, ,	1,000	-	
68/316	Assistance to the leather	r and shoe industry*			
ETH-9	- shoe technologist, chemical engineer				
	experts	2/4 m/m	10,000	-	
68/427	Feasibility study on the	establishment of a			
ETH-13	plant for soluble coffee				
	expert	1/3 m/m	8,000	-	

Guinea

67/186	Assistance to the rese	arch, test and control		
GUI-1	laboratory for vegetab	le and essential oils		
	- chemical engineer			
	expert	1/3 m/m 1/6 m/m	-	7,000
	fellow	1/6 m/m	-	3,600

Kenya

67/122	Industrial processing of			
KEN-1	specialist, marketing sp	ecialist		
	experts	2/6 m./m.	11,000	2,000

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SPECIAL INDUSTRIAL SERVICES - approved projects (cont'd)

Project	<u>1969</u>	<u>1970</u>
Project number	(in US	doll ars)

AFRICA (cont'd)

Madagascar

67/154	Assistance to the Tule	ar Vegetable Oil Compan	Y
MAC-4	- organization and man	agement specialist,	-
	industrial production engineering specialist	- ,	t
	experts	2/4 m/m 4/19 m/m	38,500 5,500
	fellows	4/19 m/m	- 16,500

Mali

67/183	Meat processing industry	development* - meat	
MLI-3	processing specialist		
	expert	1/1 m/m	2,100 -

Mauritius

67/225 NAR-4	Assistance to the tuna fish processing industry - processing and marketing specialist			
	expert	1/6 m/m	4,000	10,000
67/230	Utilisation of by-product	s of sugar-cane		
MAR-5	industries*			

consulting firm 30,000 -

1010000

67/69	Assistance to the SONA	PAB fish protein concent	trate	
NOR-2	plant - fish meal and	protein processing		
	specialist			
	experts	3/12 m/m	39,500	-
	equipment		22,200	

Bend4

68/328 RNA-11	Peasibility study for the malt production factory		i		
	expert	1/2 m/m		2,500	2,500

SPECIAL INDUSTRIAL SERVICES - approved projects (cont'd)

Project number <u>1969</u> <u>1970</u> (in US dollars)

AFRICA (cont'd)

Rwanda (cont'd)

 68/381
 Assistance for the reactivation of the Rwantexco

 RWA-8
 blanket factory* - textile manufacturing specialist

 expert
 1/1 m/m

 69/574
 Feasibility study for the establishment of a

RWA-19	والمتحادي والمحادي والمحاد والم	turing industry - tertile		
	technologist			
	expert	1/2 m/m	-	5,000

Sudan

68/257 SUD-10	and control of four	anese nationals for the runni food processing plants* nomic management specialist	<u>n.</u>	
	expert	1/3 m/m	7,000	
68/262 SUD-8		hartoum tannery - leather er chemist, marketing s and skins		
	experts	4/24 m/m	29,000	29,000
68/354 SUD-12	Feasibility study fo sugar industry - sug expert	or the expansion of the gar technologist 1/5 m/m	2,000	8,000
68/377 SUD-16	Survey of the edible	e oils and fats industry	·	• ·

SUD-16 - oils and fats technologist expert 1/2 m/m - 3,000

Togo

67/166	Cassava agro-industrial complex - manufacture			
T00-1	and marketing of dry	flakes, flour and starch		
	expert	1/6 m/m	-	14,000

SPECIAL INDUSTRIAL SERVICES - approved projects (cont'd)

<u>1969</u>	<u>1970</u>
(in US	dollars)

number

Pro ject

AFRICA (cont'd)

Uganda

69/5 16 U GA- 10	Assistance to the tannery technologist	industry - leather		
	expert	1/3 m/m	5,000	1,000
69/592 UG A- 1 3	Assistance to the cashew industry - food technolog			
	expert	1/4 m/m	-	8,000
	United A	rab Republic		
68/291	Industrial production of	raw and natural silk*		
UAR-13	- silk spinning specialis expert	τ 1/1 m/m	3,000	_
	-		5,000	-
68/374 U AR- 22	Assistance to the textile - finishing, colouring, d textile specialists	finishing industry yeing, carding and		
	experts	5/30 m/m	44,000	11,000
4	Uppe	r Volta		
68/320	Assistance in the develop	ment of the vegetable		
UPV-8	oil processing industry			
	expert	1/3 m/m	-	6,200
69/505 U PV-4	Programme of agro-industr - phase I (economy and fo			
	expert	1/3 m/m	-	6,000
	East Afric	an Community		

68/364Textile study - survey of the textile industryEAC-4consulting firm10,00030,000

SPECIAL INDUSTRIAL SERVICES - approved projects (cont*d)

Project			1969	<u>1970</u>
number			(1n UB	doll ars)
	THE AMERICAS			
	A	rgentina		
67/206	Food industry development	nt - programming expert		
ARC-2	expert	1/12 m/m	-	24,000
69/474	Footwear industry produc	ction and management		
ARG-8	expert	1/4 m/m	-	7,000
	1	Brazil		
69/534 BRA-16	Assistance to the textileconomist	le industry - industrial		
	expert	1/4 m/m	-	8,000
		Chile		
68/337	Assistance to the textil	le industry - technologis	t	
CHI-3	expert	1/6 m/m	3,000	8,000
	Dominic	can Republic		
69/496 DO M- 7	Assistance to the integr "Sacos y Tejidos Dominic			
	technologist			
	experts	2/24 m/m	-	48,000
	1	Ecuador		
68/302 ECU-5	Assistance in the reorgen industry sector - indus specialist, fabric finite dyeing specialist, market	shing specialist, fibre		
	experts	4/12 m/m	4,000	20 ,800
68/388 ECU-6	Assistance for the deve processing industry - f technologist			
	expert	1/5 m/m	-	9,000

SPECIAL INDUSTRIAL SERVICES - approved projects (cont'd)

Project number

f

1969 1970 (in UB dollars)

THE ANERICAS (cont'd)

Ourene

68/355	Assistance to Guyana Nari	teting Cor	poration		
QUY-3	- industrial engineering, technologist	economy,	fool		
	experts	2/7	m/m	4,000	12,000
69/453 GUT-4	Assistance to a particle - production specialist	board pla	nt	ı	
	expert	1/3	n/ 1	7,000	-

Hondures

69/557 1108-2	Assistance in surveying the fruit processing industry			
	expert	1/3 m/m	•	6,000

Jamaica

67/2 56 J AH- 2	Assistance to the furniture industry" - industrial production specialist			
	expert	1/1 m/m	1,500	•

Personer

of sam tropical hardwoods)	
69/494 Appiptance to the Paraguar wood proceeding PAR-4 Industry - through the Technical Standards Institute (naving tropical hardwoods, grading	

<u>Pero</u>

67/188	Assistance is improving the performance of		
PER-3	the textile industry		
	conculting firm	80,900	

SPECIAL INDUSTRIAL SERVICES ~ approved projects (cont'd)

Project number			<u>1969</u> <u>1970</u> (in UE dollars)	
	THE AMERICAS (cont'd)			
	Trini	iad and Tobago		
68/408				
TRI-9				
	expert	1/6 m/m	2,000 10,000	
	ASIA AND THE FAR EAST			
		Cerlos		
67/222	Assistance to the oils			
CEY-3	- vegetable oil techno	-		
	expert	1/8 m/m	16,000 -	
67/243	Assistance for vegetab	le oil industry		
CEY-6	development# - vegetat			
	expert	1/12 m/m	24,000 -	
68/435	Pensibility study for	the manufacture of		
CEY-11	agar-agar			
	espert	1/3 m/m	- 7,000	
69/495	Assistance for the pro	duction of grathetic		
C ET-9	resin adhesives for pl related products	MOOR CHIMNOUTE CHA		
	erpert	1/3 m/m	- 6,000	
	5.	<u>ii (Oceania)</u>		
69/532		ent of tenning and fee	tweer	
₩IJ-2	menufacturing	1/4 -/-	• ~~	
	espert	1/4 m/m	- 8,000	
69/533		d veretable processing		
FIJ-4	and marketing			

1/3 m/m

expert

6,000

<u>1969</u> <u>1970</u> (in US dollars)

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Project Aumber

> ASIA AND THE PAR HAFT (cont'd)

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Indonesia

67/174	Organisation and production improvement of			
I NS- 3	three state-owned spinning mills" - management			
	expert	1/11 m/m	21,200	-

Laos

68/336 Improvement of production methods of a match LAO-2 factorr⁴ expert 1/3 m/m 6,200 -

Malaysia

67/244 MAL-3		g the quality and producti χ - technical and management		
	erpert	1/6 m/m	14,000	-
69/ 48 9 NAL-5	Textile marketing stud expert	1/1 m/m	2,500	-
69/503 NAL-9	Peesibility study for joinery and furniture consulting firm		2,000	10,500
69/504 NAL-8	Peasibility study for particle board plant - expert	the establishment of a industrial economist 1/4 m/m	2,000	6,000

Pakistan

69/473 PAK- 7	Appintance to the East Pakistan Industrial Development Corporation (EPIDC) - summer technology (cane sugar manufacturing)			
	expert	1/6 m/m	-	12,000

1969 1970

Project number

(in US dollars)

ASIA AND THE FAR EAST (cont'd)

Singapore

68/333 SIN-5		<u>d of industrial product</u> stic products specialist, alist		
	experts	3/18 m/m	20,200	12,800
68/334 sin-6	Assistance to wood-wor			
	expert	1/16 m/m	2,000	9,000
68/358 SIN-7	Assistance to the prin specialist	ting industry - printing		
	expert	1/6 m/m	-	11,000
68/359	Assistance to the leat	her products factory		
SIN-9	expert	1/6 m/m	-	11,000
68/403 SIN-10	Assistance to the foot - manufacturing, produ of leather and footwea	action and marketing		
	experts	3/13 m/m	17,000	14,700
69/609 SIN-13	Assistance to the food			
511-15	expert	1/7 m/m	-	14,000
		Thailand		
68/ <u>3</u> 86 TH A-5	Assistance to the rice - rice growing and pro industrial economist			
	consulting firm		5,000	30,000
68/416 TH A- 4	Feasibility study for an industry based on 1 marketing specialist,	cenaf - fibre technologist,		
	experts	3/15 m/m	5,000	27,000
69/468 Th a- 8		ation and operations of nd Sugar Advisory Board		
•	expert	1/5 m/m	-	10,000

<u>1969</u> <u>1970</u> (in US dollars)

Project number

> ASIA AND THE FAR EAST (cont'd)

Thailand (cont'd)

69/594	Assistance in the deve	lopment of r	ubber products		
THA-9	industry				
	expert	1/3	m/m	-	6,000
69/5 95 TH A- 10	Modernisation and expa processing industries				
	expert	1/4	m/ m	-	8,000

EUROPE AND THE

Iceland

68/449	Export sales promotion of the integrated fish			
ICE-2	processing industry"			
	consulting firm	45,000	-	

Iraq

68/422 IRQ-2	Assistance in the preparatic plan for industrial manufact	n of a development		
	sugar from dates - refining			
	expert	1/3 m/m	3,000	5,000

Isreel

69/511		othing industry - industrial	
ISR-3	economi st		
	ernert	1/3 m/m	- 6.000

STIS

69/579	Assistance to the "A	Shark" beer processing		
STR-22	factory			
	expert	1/6 m/m	•	12.000

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Project
number

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190	59	<u>1970</u>
(in	US	dollars)

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EUROPE AND THE MIDDLE EAST (cont'd)

Yugoslavia

68/346	Assistance in beer fer	mentation to three		
YUG-12	breweries			
	expert	1/6 m/m	-	11,000
69/455	Assistance to the wood			
YUG-14	"Janj" in Donji Vakuf	- joinery specialist		
	expert	1/4 m/m 1/3 m/m	-	8,000
	fellow	1/3 m/m	2,200	-
69/466	Assistance to the "Crr	i Bor" wood industrial		
YUG-16	enterprise in Prilep			
	expert	1/3 m/m	-	6,000

Table 4

Estimated expe	nditures	for	SIS	pro jecta,	1969-1970

	1969		1970	
	<u>m/m</u>	US\$	∎∕∎	USS
Experts	65/210	432,100	58/240	538,500
Fellows	1/3	2,200	5/25	20,100
Other	-	167,200	-	78,000
Total		601,500		636,600

B. SUPPORTING ACTIVITIES

11. The supporting activities for Group 6 are classified under the following projects:

Textiles	6.01
Food processing	6.02
Wood processing	6.03
Leather and leather products	6.04

12. As was mentioned in the prefatory remarks to the section on supporting activities in Part One (ID/B/64), the objective of the supporting activities is to establish a two-way flow of information and experience between the supporting activities at headquarters and the field. A great deal of material on which headquarters' studies and meetings are based is derived from information received from the field. In turn, the studies and meetings are intended to improve the substantive support given by headquarters to the field operations. In many cases these results are fed directly to the field in the form of reports. In all cases, they constitute an accumulation of knowledge and experience on which both headquarters and field staff are able to draw in response to the needs arising in the technical assistance operations.

Textiles (6.01)

13. The programme of UNIDO in textiles reflects the recommendations of the First Interregional Workshop on Textile Industries, held in Lods (Poland) in 1965, and the experiences gained in carrying out technical assistance projects. Supporting activities concentrate on the following problem areas where advice and assistance has proven to be of practical value:

Selection of machinery; Assessment of processes to determine their suitability to developing countries; Economic aspects of the industry; Quality control.

14. The studies and reports prepared by UNIDO in the field of textiles have wide distribution. For example, the Report of Expert Group Meeting on the Selection of Textile Machinery in the Cotton Industry (ID/MG.8/1) is being

used by major machine manufacturers, national development banks and government departments dealing with the textile industry as well as by mill managers.

Expert group meeting on quality control in the textile industry (6.01.01)

15. The problem of quality control in the textile industry is receiving considerable attention as reflected by the increasing number of relevant technical assistance requests processed by UNIDO. On the basis of needs in developing countries and findings by UNIDO field experts, UNIDO plans, subject to availability of funds, to hold in 1970 an expert group meeting on quality control in the textile industry. This meeting was originally scheduled for 1969 (ID/B/26, para. 90) but had to be postponed for budgetary reasons. The purpose of the meeting is to establish guidelines and recommendations on how to introduce and operate an efficient quality control programme in a textile mill. The meeting will cover the various processing stages from spinning to dyeing and finishing. Representatives from ILO will be invited to attend. A report will be issued and distributed in 1971.

Priority B

	Staff (in m/m)	Meetings (US\$)	Consultants (US\$)
1969	1	_	8,000
1970	2	6,000	-
1971	1	-	-

Expert group meetings on the selection of machinery (dyeing and finishing industry and knitting industry) (6.01.02)

16. The first of the meetings on selection of textile machinery was held in Vienna in 1967 and was devoted to selection of machinery in the cotton industry (ID/WG.8/1). The second meeting, which focused on selection of equipment in the woollen and worsted industry, was held in Bursa (Turkey) in November 1968. The report (ID/33) will be published in 1970. The third meeting, which will deal with the selection of dyeing and finishing equipment, will be held in 1970 in Vienna (ID/B/44 para. 151 to 154) and will be guide by findings of UNIDO experts in technical assistance projects in the field of dyeing and finishing. The fourth meeting in this series will study the question of machinery selection in the knitting industry. It is proposed to hold this meeting, which was originally included in the 1970 programme under priority B (ID/B/44, para. 154), in 1971.

			Priority A
	Staff (in m/m)	Neetings (US\$)	Consultants (US\$)
1969	1	-	1,000
1970	2	5,000	4,000
1971	2	5,000	5,000

Second interregional workshop on textile industries (6.01.03)

17. This meeting is part of a series of larger meetings in textiles which aim at extending the scope of work to broader issues of national importance, in accordance with the recommendations contained in the Report of the United Nations Interregional Workshop on Textile Industries held in Lodz in 1965 (ST/TAO/SER.C/88). Among the topics to be dealt with are general policies of textile industry development, current trends in the textile industry and trade, raw material problems, as well as trends in marketing and technology. The need to discuss these problems is supported by findings of UNIDO field experts from the considerable number of technical assistance projects carried out by UNIDO in the textile industry.

18. The workshop will be held in conjunction with the in-plant training course of UNIDO in Lodz, Poland, during the second half of 1971, following two major events on the international textile scene: the International Textile Machinery Exhibition (ITMA 71) in Paris in May 1971 and the Second World Congress on Man-made Fibres in Paris in June 1971, organized by the <u>Comité</u> International de la Rayonne et des Fibres Synthétiques.

19. It is intended to prepare part of the background documentation for this workshop in 1970 through re-allocation of funds from the Regular Budget. The publication of the proceedings will be included in the 1972 work programme.

Staff
(in m/m)Meetings
(US\$)Consultants
(US\$)1969-----19704-1971415,000a/19715,000a/

a/ UNDP/TA funds.

Food processing (6.02)

20. Modern food processing industries require efficient equipment, large-scale plants, integrated production processes, adequate raw material and trained operators. UNIDO is assisting developing countries in the establishment and modernization of food processing plants by analysing market requirements, by selecting the most desirable production lines and by assisting in the elaboration of feasibility studies, selection of the most suitable production processes, equipment and plant size, location and other factors needed for producing goods in accordance with the market requirements in terms of quantity, quality, timing and price. Work in this sector is closely co-ordinated with FAO along the guidelines laid down in the agreement between UNIDO and FAO of July 1969.

Expert group meeting on fish protein concentrate (6.02.01)

21. The problem of the "protein gap" is being given increasing attention by governments, and UNIDO has received a number of technical assistance requests in this sector.

22. An expert group meeting was held jointly with FAO in Rabat, Morocco, in December 1969. By means of demonstrating the process of production of fish protein concentrates and analysing the studies prepared on the various technological aspects, guidelines were worked out for the development of concentrates on an industrial basis. The guidelines deal with aspects of equipment, plant size, location, production lines and other requirements for producing a high quality product at a competitive cost. Through the exchange of ideas among United Nations experts, representatives of developed and developing countries (ID/B/26, para. 92) and also through the dissemination of the recommendations, it is expected that UNIDO will be requested to assist the developing countries in similar projects. The proceedings of this meeting will be published in 1971.

Priority A

Priority A

Priority A

	Staff (in m/m)	Meetings (US\$)	Consultants (US\$)
1969	2	10,000	7,000
1970	1	-	-
1971	1	-	-

Expert Group Meeting on Soybean Processing and Use (6.02.02)

23. Also in recognition of the problems connected with the "protein gap", an expert group meeting was held in Peoria, Illinois, in November 1969, in cooperation with the United States Department of Agriculture and with the participation of FAO, the Protein Advisory Group and other United Nations agencies. The purpose of this meeting was to analyse the experience of certain developing countries in the field of soybean protein foods production. By means of visits to plants and laboratories and by the analysis of studies prepared by industry representatives and research centres from developed countries, the participants from developing countries had an opportunity to familiarise themselves with commercialized vegetable protein, which is already being used in the production of meat-like and meat-substitution products and which is competing successfully in appeal and general acceptance. Special attention was paid by the meeting to engineering aspects, layout, equipment problems, as well as to economic analysis adapted to developing countries.

24. Following the dissemination of the conclusions and recommendations of the meeting, which will be published in 1971, it is expected that UNIDO will be requested to assist developing countries in the establishment of similar plants. One technical assistance project is already being processed by UNIDO.

	Staff (in m/m)	Meetings (US\$)	Consultants (US\$)
1969	3	11,200	4,200
1970	2	-	-
1971	1	-	. 🗕

Expert group meeting on the selection of food processing equipment (6.02.03)

25. UNIDO has already received a number of technical assistance requests in this sector. Initial findings indicate certain problems arising from the great variety of equipment at different levels of technology. With many of the machines becoming obsolete, selection of the most appropriate equipment is a difficult problem for the developing countries which have little information and experience to go by.

26. Following the recommendations of the Athens Symposium (ID/11, para. 287), UNIDO staff carried out preparatory discussions with the Moscow Central Food Research Institute (ID/B/44, para. 169) with the objective of holding a meeting in Moscow in 1970. This will be the first of a series of annual meetings to analyse the new developments in various branches of the food processing industry and to define equipment specifications in order to help developing countries in the selection of equipment. The preparation of the background material by consultants will be financed from the Regular Budget.

Priority A

	Staff (in m/m)	Meetings (US\$)	Consultants (US\$)
1969	1	- ,	600
1970	5	19,000 ^ª /	3,000
1971	3	19,000ª/	3,000

a/ From the General Trust Fund of UNIDO.

Expert group meeting on cassava processing (6.02.04)

27. Cassava (tapioca, manioc and yam) and similar root crops can be grown in tropical regions. The consumption of cassava roots and the possibility of increasing cassava production are limited by the rapid deterioration of the root after harvesting. This problem can be solved by modern processing methods.

28. Preparations were made in 1969 for a meeting to be held, subject to availability of funds, in co-operation with FAO in Vienna in 1970 (ID/B/44, para. 165). The meeting will review the engineering aspects of production of cassava flakes for animal feedstuffs, production of cassava flour and enriched cassava.flour, processing of cassava starch, cassava sugar and syrup, and

artificial and natural drying of cassava products. An analysis will be made of technical assistance that has been given by UNIDO in the establishment and reorganization of cassava processing plants. The dissemination in 1972 of findings of this meeting is expected to lead to other technical assistance projects.

Priority D

	Staff (in m/m)	Netings (US\$)	Consultants (US\$)
1969	1	-	-
1970	2	5,000	7,000
1971	2	-	-

Expert group meeting on oils and fats (6.02.05)

29. The developing countries are already suppliers of oil-bearing materials for the world market (palm kernels, coconut, copra, sesame seeds, cocoa beans, groundnuts, linseeds etc.). In recent years, interest has been increasing in local processing of raw materials into refined edible oil, textile auxiliary products and raw materials for plastics. As much as one third of the assistance that UNIDO is giving to developing countries in the food processing industry is related to establishment and reorganisation of industrial plants that extract and refine vegetable oil and that use vegetable oil-cakes in the production of animal feedstuffs.

30. Of particular importance in this context is the utilisation of occonut. UNIDO and ECAFE are working in close co-operation with the Asian Coconut Community to assist various countries in the utilisation of this raw material. A UNDP/SF request involving the establishment of a coconut institute has been recently submitted by one of the countries of this region.

31. In 1969, UNIDO staff collected information on present and potential developments in this field, on up-to-date processing techniques and on vegetable oil markets. Subject to availability of funda, a working group meeting will be convened by UNIDO in 1970, in co-operation with PAO, at which the various aspects of industrial vegetable oil production in developing countries will be discussed and a policy of development proposed (ID/B/44, pars. 167).

Priority J

Priority A

	Staff (in m/m)	Nectings (US\$)	Consultants (US\$)
1969	1	-	-
1970	3	5,000	7,000
1971	2	-	-

Seminar on industrial processing of rice (6.02.06)

32. UNIDO is undertaking, in co-operation with BCAFE and FAO, a programme of activities to assist developing countries in reorganizing their rice processing industry. The introduction of modern methods to this industry will contribute to a better utilization of this staple food by increasing the yield and making use of rice bran, rice wax, oil and protein. The first project of this type is being undertaken in a South Asian country and other requests are expected.

33. UNIDO is planning to hold an expert group meeting in Bangkok in early 1971. Recent technological developments will be reviewed and basic guidelines for dealing with the rice processing problems will be formulated. On the basis of recommendations of the expert group meeting, a seminar will be held in late 1971, also in Bangkok (ID/B/44, para. 162). It is to be attended by representatives of international organizations, rice specialists and governmental representatives, and will define the policies to be followed to implement the above-mentioned recommendations, especially in the drawing up of terms of reference for technical assistance to be provided by UNIDO in the following years. Preparatory work for this meeting will be undertaken in 1970.

 Staff (in m/m)
 Nectings (US\$)
 Consultants (US\$)

 1969

 1970
 5
 5,000\$

 1971
 8
 25,000\$

3/ Including \$2,000 from the General Trust Fund of UNIDO. b/ Including \$20,000 from UNDP/TA funds.

Food industry series (6.02.07)

34. Since 1967 UNIDO has been preparing a series of documents on modern processing techniques in the food industry. The following are titles of documents already published or under preparation: Industrial processing of citrus fruit; The use of centri-therm expanding-flow and forced-circulation plate evaporators in the food and biochemical industry; Mater-saving techniques in food processing plants; Packaging and packaging materials with special reference to the packaging of food; Production of foodstuffs and protein enriched mixtures and concentrates: Nodern sterilization methods for milk processing: Starch production in developing countries; and Problems of grain processing in developing countries. For 1970, papers on the following subjects are scheduled: Castor cake industrialisation; Next processing industry: Cassava processing; and New sources of protein. Four new titles will be selected for the elaboration of papers in 1971 on subjects of special interest for developing countries.

Priority A

	Staff (in m/m)	Concultants (1996)
1969	2	1,000
1970	5	3,000
1971	5	4,000

s/ Including \$1,000 from the General Trust Fund of UNIBO.

Report group mosting on processing selected tropical fruits and vegetables for expert to premium markets (6.02.08)

35. UWIRD has received a number of requests for technical assistance in the production of tropical fruits and vegetables for export and proposes to hold a meeting on this subject. The meeting will be hold in co-operation with PMD, other United Nations agencies concerned with export problems, and European institutes dealing with marketing and industrialization of tropical fruits and vegetables.

36. The group will examine the problems related to the establishment of processing industries for tropical fruits and vegetables in order to work out guidelines concerning the engineering, quality, standards, costs and other conditions needed for the acceptance of such products on the markets of developed countries. On the basis of discussions of the papers submitted to this meeting, the group will make specific recommendations that will be disseminated among developing countries in 1972.

Priority A

Priority A

	Staff (in m/m)	Meetings (US\$)	Consultants (US\$)
1969	-	-	-
1970	-	-	-
1971	5	10,000	7,000

Expert Group Meeting on Scientific Approaches to the Problems of Preservation and Refrigeration of Food in Developing Countries (6.02.09)

37. In order to review the advanced techniques in this field and to suggest adaptations to the conditions in developing countries, UNIDO, early in 1969, held an expert group meeting in Vienna at which recommendations were worked out. They will be disseminated among the developing countries in 1970.

	Staff (in m/m)	Netings (US\$)	Concultants (US\$)
1969	1	6,572	50 0
1970	-	-	-
1971	-	-	-

Wood processing (6.03)

38. In this sector, the objectives of UNIDO are modernisation and establishment of medium to large-scale industries for the manufacture of: furniture; modular components for prefabricated wooden houses; wooden components used in the manufacture of agricultural equipment; matches; and particle boards from bagasse and other agricultural wastes. To accomplish these objectives, special attention is being paid to the selection of appropriate machinery, production methods, quality control, marketing, and to the utilisation of indigenous forestry resources and agricultural wastes.

39. Under the agreement between FAO and UNIDO of July 1969, the programme of supporting activities described below is being carried out in co-ordination with FAO.

Study Group on Production Techniques in Wooden Houses under Conditions Prevailing in Developing Countries (6.03.01)

40. According to the recommendation adopted at the Athens Symposium on Industrial Development (ID/11, para. 314), UNIDO, in co-operation with FAO and UNCHBP, convened a study group in November 1969 to evaluate the role of wood products as building materials under conditions prevailing in developing countries (ID/B/26, para. 94). Studies commissioned by UNIDO in 1969 were reviewed at the meeting and it is expected that the guidelines formulated at the meeting will contribute towards the development of wood processing induetries in developing countries. The proceedings of the meeting will be published and distributed in 1971.

Priority A

	Staff (in m/m)	Neetings (UUS)	Consultants (UES)
1969	3	12,000	3,500
1970	-	-	•
1971	-	-	-

Report working group on production of particle boards from agricultural wastes (6.03.02)

41. In accordance with the recommendations of the Athens Symposium (IB/11 para. 314(4)), and in order to assist developing countries to find substitutes for wood, UNIDO proposes to hold a working group in 1970 to discuss the ecommic and technical problems of production of particle boards from agricultural wastes such as coconut fibres, palm fronds, reeds, bagnese, flax and hemp (ID/B/44, para. 179). The working group, to which representatives from PAO will be invited, will take into consideration the findings of UNIDO experts who carried out technical accistance missions and other studies in the field.

The report, to be published and circulated in 1971, is expected to recommend appropriate machinery, production methods, quality contr 1 and marketing methods to ensure the successful operation of this industry in developing countries.

	Staff (in m/m)	Nectings (US\$)	Consultants (US\$)
1969	1	-	- ,
1970	4	5,000	5,000 ^{®/}
1971	-	-	-

a/ Including \$2,000 from the General Trust Fund of UNIDO.

Seminar on furniture and other secondary wood processing industries in developing countries (6.03.03)

42. The considerable interest on the part of developing countries in this sector is reflected by the great number of technical assistance requests received by UNIDO. Following up the 1970 working group on production of particle boards from agricultural wastes (ID/B/44, para. 179), UNIDO proposes to convene a seminar for one month in 1971 on joinery, furniture and other secondary wood processing industries (ID/B/44, para. 184). About 15 to 25 commonists and managers of wood processing industries will participate. This seminar will be held in a furniture industry centre in Europe to enable participants to visit modern mills. Problems of upgrading existing production facilities in developing countries will be investigated. Papers will be presented on production planning, design, training, maintenance, quality control and other problems. Although the main prientation of the seminar will be towards the furniture and joinery industries, problems faced by other secondary wood processing industries, such as manufacture of mouldings and parquet for export and wooden animal-drawn vehicles for local needs, will also be discussed. The proceedings will be published and distributed in 1972.

Priority A

ID/B/64/Add.6 Phen 51

Priority A

	Staff (in m/m)	(US\$)	Consultants (USC)
1 969	-	-	1,000
1970	2	- ,	-
1971	3	15,000	9,000

a/ UNDP/TA funds.

	Staff	Netings	Consultants
	(in m/m)	(UB\$)	(URS)
1970	-	-	5,000

Selection of woodworking mechines (6.03.04)

Expert group meeting on the selection of woodworking machinery

43. UNIDO proposes to convene an expert group meeting for two weeks in Vienna in 1971 to discuss problems connected with the selection of weekworking machinery for wood processing plants in order to recommend the technological processes and machinery best suited to conditions in developing countries. Ten experts, either producers of equipment or production managers of plants in developing countries, will be invited to participate.

	Staff (in m/m)	Neetings (UNS)	Consul tents	Prieritz A
1969	•	•	•	
1970	4	•	-	
1971	4	8,000 ^{8/}	5,000	

s/ UNDP/TA funde.

Priority J

International catalogue of woodworking machinery

44. As indicated in the 1970 programme (ID/B/44, para. 183), UNIDO noted the growing need in developing countries for an international catalogue of woodworking machinery which would assist in development planning and in the preparation of tenders. A catalogue of this type was published in 1965 by eight European countries; it is proposed, subject to availability of funds, to prepare a new catalogue which will also cover certain developing countries producing such equipment, as well as some of the developed countries not included in the 1965 catalogue. An addendum to the catalogue will be published annually, starting in 1972, and will include new machines manufactured in both developed and developing countries.

			<u>Priority</u> B
	Staff (in m/m)	Noetings (US\$)	Consultants (USS)
1970	•	-	3 ,00 0

Leather and leather products (6,04)

45. The objectives of the technical assistance programme of UNIDO in this sector are introduction and further development of modern production methods for semi-processed and finished leathers and assistance in the manufacture and marketing of properly designed leather footwear and leather goods, with a view to the possibilities of export. The projects deal with the preparation, conservation and utilisation of local hides and skins, including reptile skins.

46. Technical assistance is also given in establishing industrial plants for the manufacture of leather, leather footwear and leather goods. Work in this area is planned and executed in co-ordination with FAO, in accordance with the agreement between UNIDO and FAO.

> The development of the 1 sther and leather products industries in developing countries (6.04.01)

Preparatory expert group meeting

47. UNIDO will convene in early 1970 a preparatory expert group meeting in Vienna (ID/B/44, para. 185) to discuss problems relative to the further development of the hides and skins, leather footwear and leather goods industries in developing countries and to prepare the leather seminar planned for 1970.

48. The following studies have been commissioned to serve as the basis for discussion at the preparatory meeting in 1970 and to form part of the documentation for the seminar in 1970 (originally programmed for 1971; see ID/B/44, para. 185, 186):

(a) In 1969 -

Study on the elaboration and implementation of programmes for improving and marketing hides and skins in developing countries;

Study on the industrial production of semi-processed chrome leather from hides and skins;

Study on tanning and industrial production of reptile leather; Study on the establishment of a leather-footwear manufacturing

plant of a standard type, including the elaboration of guidelines for the footwear industry.

(b) In 1970 -

Study on the utilization of by-products from the hides and skins, leather and leather products industries;

The elaboration of universal guidelines for installations, machinery, output, capacity, cost at different stages of processing etc.

49. In 1971, it is proposed to commission a study on the role of automation in industrial leather production and its impact on the development of the leather industry. In addition to providing information for the numerous field projects in this sector, the study will be discussed at an expert group meeting programmed for 1972, which will consider the development of the leather industry within a given region, probably Latin America.

Leather seminar

50. An interregional seminar for some 25 participants, originally planned for 1971 (ID/B/44, para. 185), is proposed for two wooks in 1970 to deal with the development of industrial leather production as well as production and marketing of footwear and of leather goods in developing countries. The seminar, which will probably be held in Vienna, will be planned and executed in co-operation with PhO and ILO and will provide information for existing and future field projects in the leather sector.

Longer range programme

51. In continuation of the seminar to be held in 1970, UNIDO is planning to convene in 1972 regional meetings on two subjects:

The development of the leather industry in a given region with reference to the role of automation in industrial production of leather;

The development of the footwear manufacturing and the leather goods manufacturing industries in a given region, with emphasis on design and marketing.

52. It is expected that the first meeting will be held in Latin America and the second in Asia. This programme, which is related to the operational activities, is designed to provide the appropriate type of technical assistance needed by industry.

	Staff ^{®/} (in m/m)	Nectings	Consultants ⁴	Priority A9/
1969	2	- ,	5,000	
1970	8	26,000 ^b /	3,000	
1971	2	-	1,500	

a/ Figures refer to all activities in project component 6.04.01.

b/ US\$20,000 from UNDP/TA funds and US\$6,000 from the General Trust Pund of UNIDO.

7.468

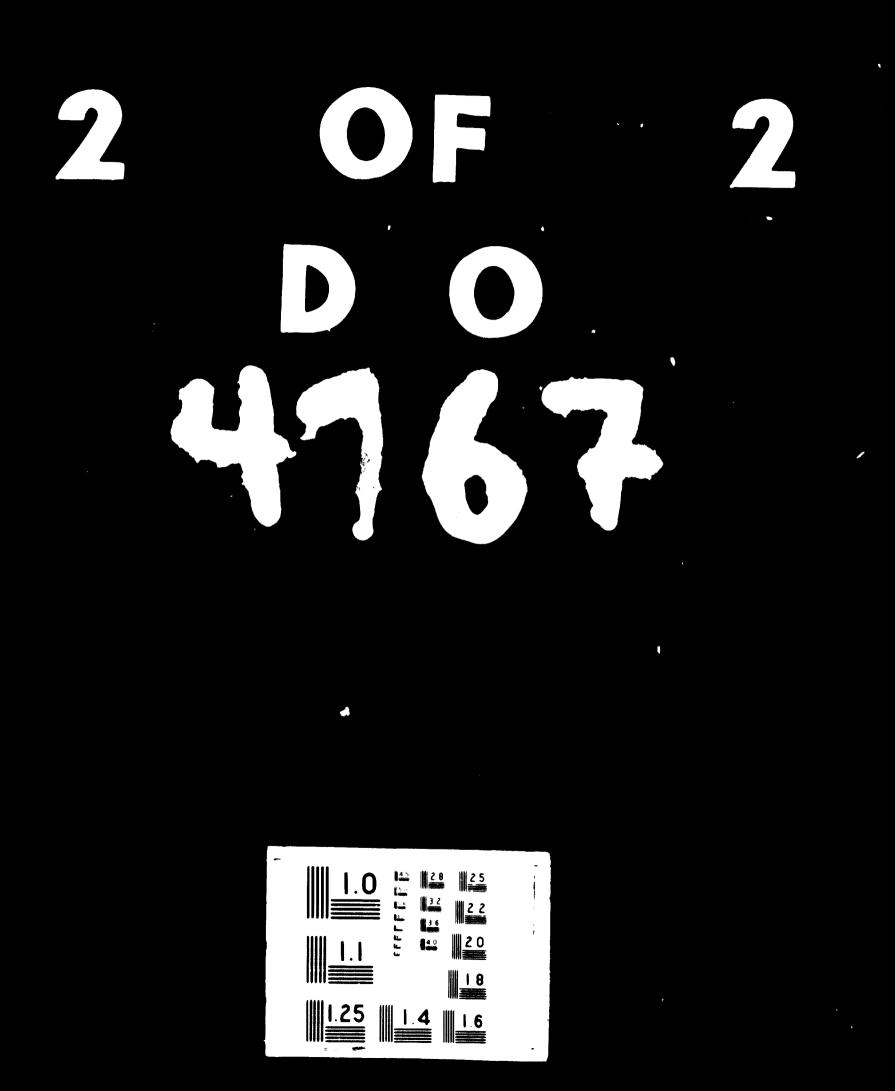
PRINTED FUBLICATIONS

Languages Cost (U31) Publications issued in 1969 Food industry studies The use of centri-therm expanding-ID/SER.I/1 flow and forced-circulation plate evaporators in the food and biochemical industries 375 ID/SER.1/2 Industrial processing of citrus fruit 378 ID/SER.1/3 Water-saving techniques in foodprocessing plants E ID/SER.I/4 Nodern sterilization methods for milk processing 3 8 ID/SIR.I/5 Packaging and packaging materials with special reference to the packaging of food 11

1970 publications programme

I D/29	Report of expert group meeting on problems of preservation and refrigera- tion of food in developing countries (Vienna, Pebruary 1969)	
ID/33	Report of expert group meeting on processing problems and selection of machinery in the woollon and worsted industry (Darea, Turkey, 1968)	3
13/88. 1/3	<u>Prod industry studios</u> Mater-saving techniques in feed- processing plants	78
1)/588. 1/4	Nodern sterilisation methods for milk processing	,
1 3/308.1/ 3	Packaging and paskaging motorials with special reference to the paskaging of feed	,

2. 2. 73



PRINTED PUBLICATIONS (cont'd)

		Languages	Cost (US\$)
	Food industry studies (cont'd)		
ID/SER.I/6	Production of feedstuffs and protein- enriched mixtures and concentrates (Zvonomir)	EFS	
-	Manual on the establishment of knitting industry in developing countries	E	
			13,700
Forecast of 1971	publications programme		
Food indust:	ry studies		
Starch (Dahlbo	production in developing countries erg)	EFS	
Meat p:	rocessing	EFS	
	pert group meeting on the production of a concentrate (Rabat, December 1969)	EFS	
Report: Exp (Peoria, Il)	pert group on soybean processing and use linois, November 1969)	EFS	
Report: Exp textile indu	pert group on quality control in the astry (June 1970)	EFS	
	: Study group on production in wooden houses (Vienna, November 1969)	EFS	
Report: Stu agricultural	ndy group on production panels from wastes (Vienna, 1970)	EFS	
Proceedings: (Novisad, No	Seminar on integrated food processing ovember 1969)	EFS	
Report: Exp in food-proc	pert group on technological development cessing equipment (Moscow, 1970)	E	
Report: Exp (dyeing and (Vienna, 197	pert group on the selection of machinery finishing industry - knitting industry) 70)	EFS	
• • • • • • • • • • • • • • • • • • •			17,800

Note: In the computation of the printing costs a standard formula was applied on averaging the cost of printing inside UNIDO and by an outside firm. The standard formula is used to provide for comparability of the cost of printing.

Table 5ª

Expenditures for supporting activities in 1969

Project components		UNIDO Reg	ular Budget		UNDP/TA	UNIDO General Trust Fund	Tetal ^b /
	(1) Staff	(2) Meeting	(3) Consu1-	(4) Publica-	(5)	(6)	(7)
		USE	tents <u>US</u>	tions USE	US‡	ust	
6-01-01	1	•	8,000		YYY		
6_01-02	1	•	1,000		-	•	8,000
6-02-01	2	10,000	7,000		-	•	1,000
6-02-02	3	11,200	4,200		-	•	17,000
6-02-03	1	•	600		•	-	15,400
6-02-04	1	•	-		•	-	600
8-02-05	1	•	-		•	•	•
6-02-07	2		1,000		•	•	•
6-02-09	1	6,572	500		•	•	1,000
8-03-01	3	12,400			•	•	7,072
6-03-02	1		3,500		•	-	15,900
6-03-03	T	•	•		•	•	•
6-04-01	•	•	1,000		•	•	1,000
	2	•	5,000		•	•	5,000
Total	19	40,172	31,800	7,468			
					•	•	79,440

a/ Expenditures have been calculated on the basis of actual expenditures up to 30 September 1969, projected to the end of the year.

b/ The totals in column 7 do not include the cost of publications. Thus the total of the items in this column does not correspond to the last line of the column.

Table 6

Estimated expenditures for supporting activities in 1970

Project components		UNIDO Reg	ular Budget		UNDP/TA	UNIDO General Trust Fund	Tota 1ª/
	(1) Staff	(2) Meetings	(3) Consul- tants	(4) Publica- tions	(5)	(6)	(7)
	<u>/</u> .	USS		US	US	USE	US
Priority A							
6-01-02	2	5,000	4,000		-	-	9,000
6-01-03	4	•	5,000		-	-	5,0 00
6-02-01	1	-	-		-	-	-
6-02-0 2	2	-	•		•	-	-
6-02-03	5	•	3,000		-	19,000	22,000
6-02-06	5	•	3,000		-	2,000	5,000
6-02-07	5	-	2,000		•	1,000	3,000
6-03-02	4	5 ,00 0	3,000		-	2,000	10 ,000
6-03-03	2	-	-		-	-	-
6-03-04	4	•	-		-	-	-
6-04-01	8	-	3,000		20,000	6,000	29 ,000
To ta 1	42	10,000	23,000	13,700	20,000	30,000	96,700
Priori ty B							
6-01-01	2	6,000	-		•	-	6,000
6-02-04	2	5 ,00 0	7,000		-	-	12,000
ô-02-05	3	5,000	7,000		-		12,000
6-03-03	-	-	5 ,000		-	-	5,000
6-03-04	-	-	3,000		-	-	3,000
To ta I	7	16,000	22,000	-	-	-	38,000

a/ The totals in column 7 do not include the cost of publications. Thus the total of the items in this column does not correspond to the last line of the column.

	Estimated expenditures for supporting activities in 1971						
Project components	UNIDO Regular Budget				UNDP/TA	UNIDO General Trust Fund	Total [®] /
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Staff	Meetings	Consul- tants	Publi ca- tions			
	<u>/n_</u>	USE	US	USt	US	ust	USS
Priority A							
6-01-02	2	5,000	5 ,000		-	_	10,000
6-01-03	4	-	-		20,000	_	20,000
6-02-01	1	-	-		•	_	
6-02-02	1	-	-		* -	_	1
5-02-0 3	3	-	3,000		•	19,000	22,000
6-02-06	8	5 ,000	-		20,000	-	25,000
6-02- 07	5	-	4,000		-	_	4,000
6-02-08	5	10,000	7,000		•	-	17,000
6-03-03	3	-	-		24,000		24,000
6-03-04	4	-	-		13,000		13,000
6-04- 01	2	-	1,500		-	-	1,500
To tel	38	20,000	20,500	17,800	77,000	19,000	154,300
Priori ty B				1	×	I	l
6-01- 01	1	-	•		•	-	-
6-02-04	2	•	-		•	-	-
6-02-05	2	•	-		•	•	•
Total	5	•	•	•	*	•	

Table 7

The totals in column 7 do not include the cost of publications. Thus the total of the items in this column does not correspond to the last line of the column.

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