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-&& LESS THAN ONE MILLION

2. MACHINERY & AUTOMATION TECHNOLOGY DEVELOPMENT PROJECT

	٠,	v	TOTAL
NAMES OF THE PROGRAMS	BEGIN	END	ESTIMATED EXPENDITURE
			(USD)
1) AUTOMATION MECHANISM R&D	1991	1995	26
- 5-YEAR PLAN 2) AUTOMATIC SENSING TECHNIQUE	1991	1995	2 a
- 5-YEAR PLAN	1331	1333	LD
3) METALWORK AUTOMATION TECHNO-	1991	1995	64
- LOGY, 5-YEAR PLAN			
4) PRODUCTION AUTOMATION TECHNO-	1991	1995	24
- LOGY, 5-YEAR PLAN	1001	1005	40
O COMPUTER MANUFACUTRING SYSTEM R&D, 5-YEAR PLAN	1331	1332	42
MACHINERY MATERIALS APPLICA-	1991	1995	42
- TION, 5-YEAR PLAN			
7) PRECISION COMPONENT TECH	1991	1995	35
- DEVELOPMENT, 5-YEAR PLAN			
8) METAL MATERIALS TECH			
- DEVELOPMENT, 5 YEAR PLAN	1991	1995	36
) INDUSTRIAL MACHINERY TECH	1987	1992	18
5-YEAR PLAN	5.94 Makano	north Market	We-1200
D VECHILE & COMPONENT TEST	1991	1995	1 Ø9
- 5-YEAR PLAN 1) DYMANIC SYSTEM ON MOTOR	1992	1000	29
- VEHICLES R&D, 5-YEAR PLAN	1332	1330	23
2) SHIPBULDING TECHNOLOGY	1889	1992	10
- 5-YEAR PLAN			
(3) PREPARATORY PLAN FOR FACILITY	1992	1992	-&&
- FOR SHIP BUILDING RESEARCH			
14) TEST FACILITY FOR AEROSPACE	1997	1992	3
- INDUSTRY	1002		•
TOTAL		14	458
3. MATERIALS & PROCESSING TECHNOL	LOGY DEV	EL OPMEN	T PROJECT
			TOTAL

	F	γ	ESTIMATED		
NAMES OF THE PROGRAMS	BEGIN	END	EXPENDITURE		
			(D2U)		
1) SPECIAL CHEMICAL PRODUCTS MANUFACTURE & USE R&D, 5-YR PLAN	1991	1995			
2) FUNCTIONAL HIGH POLYMER - TECH DEVELOPMENT, 5-YR PLAN	1991	1995	32		
3) FIBRE MANUFACTURE & APPLICA- - CATION, Y-YEAR PLAN	1991	1995	38		
4) TEXTILE TECHNOLOGY	1991	1995	21		
- 5-YEAR PLAN 5) DYEING INDUSTRY TECH DEVELOP-	1991	1995	33		
- 5-YEAR PLAN 6) UPGRADING OF CLOTHING INDUSTRY	1991	1995	36		
- 5-YEAR PLAN 7) HIGH-TEMPERATURE SUPER CONDUC-	1990	1993	11		
- TOR RESEARCH, 4-YEAR PLAN TOTAL			194		
4. ENVIRONMENT AND RESOURCES TECH	DEVELO	PMENT	PROJECT		

4. ENVIRONMENT AND RESOURCES TECH DEVELOPMENT PROJECT

TOTAL FY ESTIMATED

P 100941Z JUN 91 FM AIT TAIPEI TO AIT WASHDC PRIORITY INFO AMEMBASSY TOKYO AMEMBASSY SEOUL AMEMBASSY BEIJING

UNCLAS TAIPEI 84888

AIT/W PASS EAP/RA/TC

E.O. 12356: N/A TAGS: KSCA, KPRP, AIFA, TNGD, TSPL, TW SUBJECT: MINISTRY OF ECONOMIC AFFAIRS'S 6-YEAR R&D PLAN

1. THE FOLLOWING PROVIDES THE BUDGET FOR TAIWAN'S MINISTRY OF ECONOMIC AFFAIRS (MOEA) 6 YEAR R&D PLAN AS WELL AS INITIAL 12 YEAR PLAN RESEARCH PROPOSALS. AN ANALYSIS OF THE MOEA R&D BUDGET AND DEVELOPMENT STRATEGY WILL FOLLOW SEPTEL.

PROJECTS PRESENTLY BEING UNDERTAKEN

1. ELECTRONICS AND INFORMATION TECHNOLOGY R&D PROJECT

UNIT: USD MILLION (USD! EQUALS APPROX. NTD27.5)

NAMES OF THE PROGRAMS		v	TOTAL
NAMES OF THE PROGRAMS	BEGIN	END	EXPENDITURE
			(UCD)
1) ELECTRONICS MATERIALS STUDY - 5-YEAR PLAN	1991	1995	(USD) 43
2) SUB-MICRON PRODUCTION TECH - 5-YEAR PLAN	1991	1995	214
3) MICROELECTRONICS DEVELOPMENT - 4-YEAR PLAN			
4) STRUCTURE OF ELECTRONIC - PRODUCTS, 4-YEAR PLAN			18
5) COMPUTER SYSTEM DEVELOPMENT - 5-YEAR PLAN			7.0
6) ELECTRONICS TECHNOLOGY IN - TELECOMMUNICATIONS, 4-YR PLAN			
7) HIGH-QUALITY TV TECHNOLOGY			
8) INFORMATION SOFTWARE - FOUR-YEAR PLAN			48
9) HUMAN-THINKING COMPUTER	1992	1996	78
18) PROMOTION OF INFORMATION!-	1992	1996	-&&
11) COMPUTER CENTER FOR ITRI 12) INDUSTRY TEST & SURVEY TECH-	1992	1995	21
	1992	1996	20
- NOLOGY, 5-YEAR PLAN 13)ELECTROPTICAL MATERIALS RE SEARCH, 5YEAR PLAN	1991	1995	28
14) ELECTROPTICAL TECHNIQUE & - APPLICATION, 5-YEAR PLAN	1992	1996	56
15) ELECTROPTICAL INFORMATION - TECHNIQUE, 5-YEAR PLAN	1992	1996	41
TOTAL			997

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		I			J			
PAGE 82 OF 84 AIT TA 84888 88 0 NAMES OF THE PROGRAMS	F Ø6 1ØØ9 BEGIN I		SHB1083	TOT	AIT TA 84888 88 OF 86 1889497 AL	42	20	SHB1Ø83
		(USD)		PRO.	JECTS IN PLANNING			
1) MATERIALS ACCESSMENT &	1991 1	195 15						
<ul> <li>PRESERVATION, 5-YEAR PLAN</li> <li>INDUSTRY SAFETY &amp; DISASTER</li> <li>PREVENTION, 5-YEAR PLAN</li> </ul>	1992 1	196 31		1.	ELECTRONICS AND INFORMATION TECHNOLOGY R&D	PROJECT FY		
3) ANTI-POLLUTION TECH - DEVELOPMENT, 3-YEAR PLAN	1991 19	193 23		-	NAMES OF THE PROGRAMS	BEGIN	END	
4) INDUSTRIAL WASTE WATER - MANAGEMENT, 3-YEAR PLAN		193 3			ELECTRONICS MATERIALS STUDY, 2ND 5-YEAR PLAN	1996	2000	
5) INSHORE RESOURCES TECH - R&D, 5-YEAR PLAN		196 26			SUB-MICRON PRODUCTION TECHNOLOGY, 2ND	1996	2000	
6) PREPARATORY WORK ON CONSOLI- - DATED INDUSTRIAL WATER USAGE TOTAL	1992 19	98		3)	5-YEAR PLAN SEMI-CONDUCTOR TECHNOLOGY DEVELOPMENT 5-YEAR PLAN	1993	1997	
TOTAL		30		4)	HIGH RESOLUTION LED TECHNOLOGY 5-YEAR PLAN	1993	1997	
5. FOOD AND MEDICAL TECHNOLOGY DI	EVEL OPMENT	PROJECT		5)	STRUCTURE OF ELECTRONIC PRODUCTS 5-YEAR PLAN	1994	1998	
	FY	TOTAL ESTIMATED		-	COMPUTER TECHNOLOGY DEVELOPMENT, 2ND 5-YEAR PLAN	1996	2001	
NAMES OF THE PROGRAMS	BEGIN E				ELECTRONICS TECHNOLOGY IN TELECOM- MUNICATIONS, 2ND 5-YEAR PLAN	1994	1998	
1) MICROORGANISM PRESERVATION - & RESERACH, 4-YEAR PLAN	1989 19	92 9			HIGH-QUALITY TV TECHNOLOGY DEVELOPMENT, 2ND 5-YEAR PLAN	1997 1993	2001 1997	
2) BIOTECHNOLOGY DEVELOPMENT & - PROMOTION, 4-YEAR PLAN	1990 19	93 47			INFORMATION SOFTWARE PROMOTION, 2ND 5-YEAR PLAN HUMAN-INTELLIGENCE COMPUTER DEVELOPMENT	1993	1997	
3) FOOD PROCESSING & PACKAGING - TECH, 4-YEAR PLAN	1990 19	93 13		-	5-YEAR PLAN PROMOTION OF GOVERNMENT COMPUTERIZATION	1997	2001	
<ul> <li>4) PHARMACEUTICAL CHEMISTRY TECH</li> <li>DEVELOPMENT, 5-YEAR PLAN</li> </ul>	1991 19			12)	5-YEAR PLAN DEVELOPMENT OF INDUSTRIAL INSTRUMENTS,	1997	2001	
5) PHARMACEUTICAL INDUSTRY TECH - DEVELOPMENT, 5-YEAR PLAN	53-51-71 1955	95 80		13)	5-YEAR PLAN ELECTRONIC INFORMATION EXCHANGE SYSTEM,	1993	1997	ì
6) MEDI-CARE EQUIPMENT TECH - DEVELOPMENT, SYEAR PLAN TOTAL	1991 19	95 16 195		14)	5-YEAR PLAN ELECTROPTICAL MATERIALS RESEARCH,	1996	2000	
6. CONSTRUCTION & DESIGN TECHNOLO	חבע חבונבו חם			15)	2ND 5-YEAR PLAN ELECTROPTICAL TECHNIQUES & APPLICATION 2ND 5-YEAR PLAN	1997	2001	**
- (NOT YET SET UP)	AT DEVELOR	HENT PROJECT		16)	ELECTROPTICAL INFORMATION TECHNIQUE	1997	2001	
<ol> <li>FUNDAMENTAL FACILITIES AND OVE PROJECT</li> </ol>	RALL TECH	DEVELOPMENT		2.	2ND 5-YEAR PLAN MACHINERY & AUTOMATION TECHNOLOGY DEVELOPM MACHINERY & AUTOMATION TECHNOLOGY DEVELOPM	ENT PROJ	ECT	
		TOTAL			NAMES OF THE DEOCEAMS	FY BEGIN	CND	
-	FY	ESTIMATED		•	NAMES OF THE PROGRAMS	DEGIN		
NAMES OF THE PROGRAMS	BEGIN E	ND EXPENDITURE		1)	AUTOMAION MECHANISM R&D 2ND 5-YEAR PLAN METALLOPPING AUTOMATION TECHNOLOGY	1996	2000	
		(USD)		2)	RESEARCH, 2ND 5-YEAR PLAN	1330	2000	
1) INFORMATION SERVICE TO	1990 19	93 20		-	ZNU 5-TEAK PLAN		2000	
	1992 19	92 -&&			OND E-VEAD DIAN	1996	2000	
- NEWTWORK 3) INDUSTRY POLICY DECISION MAKING STUDY, 4-YEAR PLAN	1992 19	95 7		- 5)	2ND 5-YEAR PLAN	1996 1996	2000	
4) LABS AND FACILITIES FOR ITRI 5) R&D PERSONNEL TRAINING	1991 19 1992 19	94 81 94 22		- 71	2ND 5-YEAR PLAN INDUSTRIAL MACHINERY TECH DEVELOPMENT		1997	
- 3-YEAR PLAN 6) PROMOTION OF INDUSTRY R&D	1550050 1500	34 22		-	2ND 5-YEAR PLAN VEHICLE & COMPONENT TEST TECH DEVELOPMENT		2000	
7) FOREIGN TECHNOLOGY TRANSFER 8) SPECIAL INDUSTRY TECH	199Ø 19 1992 19	92 1Ø9			2ND 5-YEAR PLAN AUTOMOBILE MOTOR R&D		2001	
- DEVELOPMENT, WITH DURATION - OF VALIDITY				-	2ND 5-YEAR PLAN SHIP BUILDING TECHNOLOGY		1997	
9) S&T PROMOTION PROGRAM BY THE	1992 19	92 3						
- MINISTRY OF ECONOMIC AFFAIRS 10) DEVELOPMENT AND GUIDANCE ON - MAINSTREAM PRODUCTS	1992 19	92 16		11)	2ND 5-YEAR PLAN FACILITY FOR SHIP BUILDING RESEARCH 6-YEAR PLAN	1993	1998	

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			L		J
	GE 03 OF 04 AIT TA  04080  00 OF 06  1009492   AEROSPACE INDUSTRY R&D - 5 YEAR-PLAN	1993	1998	SHB1Ø83	AIT TA 84888 88 OF 86 188949Z SHB1883 4) CONSTRUCTION TESTING TECH DEVELOPMENT 1993 1997 - 5-YEAR PLAN
3.	MATERIALS & PROCESSING TECHNOLOGY DEVELOPM				7. FUNDAMENTAL FACILITIES AND OVERALL TECH DEVELOPMENT
		-			PROJECT
•		BEGIN			- NAMES OF THE PROGRAMS BEGIN END
1)	SPECIAL CHEMICAL PRODUCTS MANUFACTURE	1996	2000		- NAMES OF THE PROGRAMS BEGIN END  1) INFORMATION SERVICE TO INDUSTRIES & 1994 1998  - STABLISHMENT OF DATA RANK, 5-VP PLAN
2)	& USE R&D, 2ND 5-YEAR PLAN FUNCTIONAL HIGH POLYMER TECH DEVELOPMENT	1996	2000		- ESTABLISHMENT OF DATA BANK, 5-YR PLAN 2) ESTABLISHMENT OF INFORMATION SERVICE 1993 1995
	2ND 5-YEAR PLAN FIBRE MANUFACTURE & APPLICATION	1996	2000		- NETWORK
4)	2ND 5-YEAR PLAN TEXTILE TECHNOLOGY	1996	2000		3) R&D PERSONNEL TRAINING 4-YR PLAN 1995 1998 4) REGIONAL CONSOLIDATED R&D CENTER 1993 1997 5) SPECIALTY TECH RESEARCH PARK 1993 1997
5)	2ND 5-YEAR PLAN DYEING INDUSTRY TECH DEVELOPMENT	1996	2000		6) INDUSTRY POLICY DECISION-MAKING STUDY 1986 1990
6)	UPGRADE OF CLOTHING INDUSTRY		2000		- 5-YEAR PLAN 7) PROMOTION OF INDUSTRY R&D 1997 2881
7)	2ND 5-YEAR PLAN HIGH-TEMPERATURE CONDUCTANCE RESEARCH	1994	1988		8) SPECIAL INDUSTRY TECH DEVELOPMENT 1993 1997 - WITH DURATION OF VALIDITY 1993 1997
	2ND 5-YEAR PLAN NEW MATERIALS TECH R&D	1993	1997		9) S&T PROMOTION PROGRAM BY THE MINISTRY 1993 1997 - OF ECONOMIC AFFAIRS
4.	ENVIRONMENT AND RESOURCES TECH DEVELOPMENT	PROJECT			10) DEVELOPMENT AND GUIDANCE ON MAINSTREAM 1993 1993 - PRODUCTS
	NAMES OF THE PROGRAMS	FY			FUNDING ESTIMATES
11		BEGIN	2000		IN ORDER TO UPGRADE THE INDUSTRIAL TECHNOLOGY, MOEA MADE THE BUDGET FOR THE 6 YEAR PLAN TO SUPPORT INDUSTRIES'
	2ND 5-YEAR PLAN	1997	2001		DEVELOPMENT OF CRUCIAL TECHNIQUES, AS WELL AS TO ASSIST
-	2ND 5-YEAR PLAN ANTI-POLLUTION TECH DEVELOPMENT	. • . • . • . • . • . • . • . • . • . •	1996		MANUFACTURERS TO EXPAND THEIR RESEARCH AND DEVELOPMENT. THE BUDGET AND THE CLASSIFICATIONS ARE INDICATED IN THE
	2ND 3-YEAR PLAN IN-SHORE RESOURCES TECH DEVELOPMENT		2001		FOLLOWING TABLES.
-	2ND 5-YEAR PLAN		1001		THE MAIN ITEMS OF INCREASE IN THE NEW BUDGET VS. THE PRESENT EXPENDITURES ARE AS FOLLOWS:
5)	CONSOLIDATED INDUSTRIAL WATER USAGE 5-YEAR PLAN	1993	1997		1. FUNDS TO ESTABLISH "REGIONAL R&D CENTER" AND "R&D SPECIALTY PARK".
5.	FOOD AND MEDICAL TECHNOLOGY DEVELOPMENT PR	OJECT			
		FY			<ol><li>FUNDS TO PROMOTE R&amp;D AMONG THE STATE-OWNED AND PRIVATE ENTERPRISES.</li></ol>
-	NAMES OF THE PROGRAMS	BEGIN	END		3. FUNDS TO ESTABLISH MUTUAL TECHNOLOGY DEVELOPMENT
1)	FOOD PROCESSING AND PACKAGING TECH 2ND 5-YEAR PLAN	1994	1998		CENTER.
2)	MICROORGANISM PRESERVATION AND RESEARCH 2ND 5-YEAR PLAN	1993	1997		4. FUNDS TO SET UP OVERSEAS R&D AND PROMOTION CENTERS.
3)	BIOTECHNOLOGY DEVELOPMENT AND PROMOTION 2ND 5-YEAR PLAN	1994	1998		<ol><li>FUNDS SPECIALLY ALLOCATED FOR "CONSTRUCTION AND DESIGN".</li></ol>
4)	PHARMACEUTICAL CHEMISTRY TECH DEVELOPMENT 2ND 5-YEAR PLAN	1996	2999		6. FUNDS FOR LARGE-SIZED R&D PLANS OR FOR SETTING UP
-	PHARMACEUTICAL INDUSTRY TECH DEVELOPMENT 2ND 5-YEAR PLAN	1996	2000		FACILITIES.
6)	MEDI-CARE EQUIPMENT TECH DEVELOPMENT 2ND 5-YEAR PLAN	1996	2000		<ol> <li>FUNDS TO IMPROVE THE FACILITIES AND HUMAN RESOURCES IN R&amp;D ORGANIZATIONS.</li> </ol>
6.	CONSTRUCTION AND DESIGN TECHNOLOGY DEVELOP	MENT PRO	JECT		MINISTRY OF ECONOMIC AFFAIRS S&T BUDGET
-	NAMES OF THE PROGRAMS	FY BEGIN	END		*
1)	CONSTRUCTION AND DESIGN TECH DEVELOPMENT	1993	1997		UNIT: USD MILLION (USD1 EQUALS APPROX. NTD27.5)
2)	5-YEAR PLAN ELETRICAL ENGINEERING DESIGN AND TECH	1993	1997		FISCAL YEAR AMOUNT
3)	DEVELOPMENT 5-YEAR PLAN CONTRUCTION MATERAILS TECH DEVELOPMENT	1993	1997		1987 135
-	5-YEAR PLAN				1988 16Ø 1989 171

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1991			291					
1992			471					
1993			620					
1994			800					
1995			947					
1996			1,081					
1997			1,188					
NOTES:	4	CV07 0	1 ACTUAL	EVDEN	DITH	IDEC		
MOLE 2:	1.		11 - ACTUAL		טווט	KES		
	2.	1197-3	17 - ESTIMA	NOTE				

S&T DEVELOPMENT BUDGET

UNIT: USD MILLION (USD1 EQUALS APPROX. NTD27.5)

CATEGORY			BUDGET					
	Y92	FY93	FY94	FY95	FY96	FY97	92-97 TOTAL	
ELECTRONICS & INFORM.	170	198	240	265	292	3Ø9	1,474	
MACHINERY & AUTOM'N	69	81	112	142	162	178	744	
MATERIALS & PROCESS	38	93	120	142	162	178	733	
ENVIRONMENT & RESOURCES	16	25	40	57	76	95	309	
FOOD & MEDICINE	37	56	88	95	198	119	495	
CONSTRUCTION & DESIGN	Ø	6	24	47	65	83	225	
FUNDAMENTAL FACILITIES	141	161	184	199	216	226	1, 127	
TOTAL	471	620	800	947	1, Ø81	1,188	5, 107	

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NOTES: THE ABOVE S&T BUDGET INCLUDES:
(1) FUNDS FOR R&D PROJECTS CONSIGNED TO CORPORATE BODY;

<sup>(2)</sup> FUNDS FOR R&D PROJECTS CONSIGNED TO PRIVATE SECTOR;

<sup>(3)</sup> FUNDS FOR IMPROVEMENT OF ENVIRONMENTAL R&D AND R&D PROMOTION