

THE ECONOMIC TIMES

More consumer subsidies soon?

The Ministry of Foreign and Internal Trade is taking steps to sell imported essential items at subsidised rates in an effort to bring down the cost of living that continues to rise rapidly, according to official sources. It is understood that instructions have already been issued to the State Frading Corporation in this connection.

The Ministry of Finance on the other hand is trying its level best to reduce consumer subsidies in an effort to bridge the Budget deficit.

The Ministry of Trade is of the view that the loss on this subsidy could be made good by substantial increases in the price range of luxury goods that have already reached fantastic heights!

Vol. 2 No. 20

Sunday 16th January 1972

Price 50 ets

COLOMBO CONSUMERS PRICE INDEX

The Colombo Consumer's The Colombo Consumer's Price Index number for the month of November 1971 stood at 147.6, registering an increase of 3.2 points as against the index figure of 144.4 for the preceding month, according to the latest data released by the Central Bank.

The increase in the all items index was mainly due to the increases in the sub-indices for food and miscellaneous items by 2.9 per cent and 2.0 per cent respectively.

The prices of rationed rice, tea dust, prepared tea with milk, coffee seed, acrated waters, dried chillies, pepper, turmeric, garlic, vinegar, mustard, cummin seed, mathe seed, fruit leafer tard, cummin seed, mathe seed, fruit, leafy and up country vegetables, local jam, beef, mutton, dried fish, coconut, and potatoes, registered noticeable increases, thus offsetting the effect of price declines in the tea B. O. P., limes, yams, coconut oil and fresh fish (paraw, mullet) in the food group.

In the miscellaneous group, while the price of betel and arecanut declined, the prices of tobacco and postage in-creased. The indices for clothing, fuel and light and rent remained unchanged. On the sectorial classification, the indices for the domestic import and exclassification, the indices for the domestic, import and ex-port groups increased by 2.2 per cent, 2.6 per cent and 0.3 per cent respectively, when compared with the respective indices for the preceding mon-

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The average Colombo Comsumers' Price Index for the first eleven months of 1971 was 2.4 per cent higher than that of the corresponding period of 1970.

The increase in the average index was the result of the rise in the sub indices; 5.3 per cent in clothing 3.9 per cent in miscellaneous items, 3.6 per cent in fuel and light, and 1.5

per cent in food. The index for rent remained unchanged. On the sectoral classification the average sub-indices for domestie and export groups increased by 3.9 per cent and 1.1 per cent respectively. While the index for the import groups declined by 0.2 per cent as compared with the respective indices for the corresponding period of 1970. The index

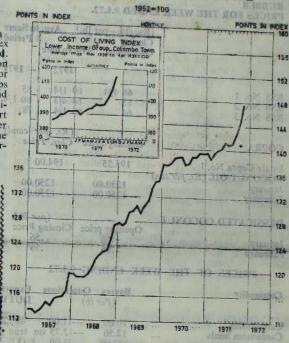
Business Development: (Exclusive series)

The Economic Times will feature a series of articles dra-The Economic Times will feature a series of articles drawn up by specialists on subjects that have contributed in major fashion to American business development. These include discussions on innovation and creativity, the technical entrepreneur, the role of management consultant the contribution of industrial psychologists and the graduate school of business etc. Of perhaps greatest importance will be education's contribution to economic growth.

We believe these articles should be of special interest to our own entrepreneurs in providing the special work climate designed to encourage productivity and creati-vity in their industrial organisatons and thus achieve their

TABLE

For the first article in the series see page 6 & 7.



************************* Industrial Development Supplement

This Supplement will appear in our February issue and not in January as indicated earlier.

Govt. Revenue up

Government Revenue for the months of October 1971 and November 1971 showed a considerable overall increase compared with the corresponding months of the previous year. Receipts from the sale of FEECs almost doubled from Rs. 47 million to Rs. 89 million according to latest Central according to latest Central Bank data.

The receipts from Income Tax, estate duty etc. were Rs.95 million as compared with Rs. 79 million collected in the first two months of the previous financial year.

in the first two months of the previous financial year.

While the revenue from the tobacco tax increased by Rs. 13 million the revenue from the turnover tax showed an increase of Rs. 5 million, when compared with the same period of the previous financial year.

The major items of Govern-

The major items of Government revenue are shown in the Table below, which records about three-fourths of GovernMajor Items of Government Revenue

Rs. Million

-							
	Sources	do l'on	1	November 1970	November 1971	Oct.'70 to Nov. 70	Oct.'71to Nov. '71
1.	Customs (a) Imports duties (b) Licence fees on im (c) Export duties (incl	 ports†	00.26(-	42.4 20.9 0.1	42.8 18.4	85.5 39.1 0.3	86,3 38.0 2.1
2. 3	Tea tax (d) Sundries Receipts from sale of F Income tax ,estate duty (a) Income tax (c) Estate duty (c) Stamps (d) Wealth tax	which	which	1.80	24.4 2.2 33.4 55.7 36.6 1.5	46.0 4.9 0.2 46.7 79.2 68.0 1.5 4.1 3.3	48.1 •5.6 0.1 88.9 95.2 70.3 2.6 2.2 3.4
5.	Profit from sale of Arra Tobacco tax Turnover tax	ck for root will can	Hijers P.	12.5 25.1 2.1	13.0 25.1 11.9	25.0 38.6 70.7	26 0 50.2 75.7

These figures have been revised to take into account the licences fees collected by the Ministry

of Industries and Scientific Affairs.

A revenue head appearing in the Government Accounts which includes in come tax, estate duty stamps, personal tax, rice subsidy tax, wealth tax, gifts tax and collection of arears from certain taxes which are now abolished.

CEYLON'S FORTNIGHTLY FINANCIAL REVIEW

MARKET PRICES

COLOMBO

CLOSING PRICES 11-1-72

TEA (Rs. Cts. Per lb.)

Approximate range of prices (including teas sold Ex, Estates

	B.O.Ps		B.O.P.Fs		
High Grown:	Rs. Cts 1.75 1 at 3.50	Rs. Cts 3,30 1 at 3.60	Rs. Cts 2.05 2 at 3.00	Rs. Ct. - 2.00 1 at 3.05	
Medium-Grown: Small Leaf Low-	1.76	1 at 3.90 2.00	1000 0000	2.15	
Grown: Leafy Low-Grown: Tea For Price:	1.95 1.98 1.45	-2.00 -2.25 -1.65	1.90	- 1.98 - 0.80	
Tippy Teas:	F.B.O 2.00	.Ps 2.30	F.B.O.P 2,00	— 7.90	
	2 at 2.39			at 40.00 at 66.00	

COLOMBO CONSUMERS PRICE INDI PRICES FOR THE WEEK ENDED 9.1.72.

	(Rs. cts.—per lb. Avg. to Sam Closing Perio Quotations Avg. to date				
to the same of the	Service Assessment	1972	1971		
RSS No. 1 RSS No. 2 RSS No. 3	65 6	9 1/4 85 4 4/3 80 3 1/4 78	1/4		
COPRA •	Opening Price	(Rs. per co			
Estate Copra No. 1 COCONUT OIL (Rs. per ton	195.25	194.00	de a		
January February	1250.00 1250.00	1250.00 1250.00			
DESSICATED COCONUT	1	(per lb	3		
January	Opening price	Closing Price.56	ce		
February	.56	.56	7		

PRICES OF THE WEEK ENDING 9.1.72

Commodity			Buyers (Per	Quotations lb)	Export DUTY
Cardamoms	*** 0000		19.00	-11.00	40%e
Cardamom Seeds			12.50	-12.75	on true
Cloves			27.00	-28.00	F.O.B.
Cloves Stems	000000	100000	4.25	-11.50	value
Mace			17.00	-18.00	runuc
Nutmet (Shelled)	Amor	new of	4.10	4.50	-Y
Nutmeg (Unshelled) and an	ugor	2.00	- 2.25	EEL
Pepper (Black)	TRACTOR		4.75	5.00	PP.
Papain (White)		201 44	21.50	-22.00	
Papain (Brown)	101 20	WYSE !!	1517.50	18.50	issue
Cinnamom HJ1		***	2.75	_	20% on
Cinnamom HJ2	200000		2.65		true f.o.b
Cinnamom Quiling	s No. 1		2.40		value

na Millio	Per Cwt. Buyers Quot.	port Duty
Cocoa Coffee Kapok (Clean) Kapok (Unelan) Croton Seeds	141.00 —145.00 300.00 — 145.00 50.00	40% on true f.o.b value
Cinnaimom Leaf Oil Cinnamom Bark Oil Citronella Oil Estate Qualit	16.50 per 25 ozs Per oz. 20.00	
Citronella Oil Ordinary	y Per lb. 7.00 Per lb 6.80	10% on true f.o.b.

SUBSIDIARY CROPS S ... WEEKLY PRICE LIST POYA ENDING 9.1.72

The undernoted quotations are the Wholesale Buyers Prices paid in Colombo and is maintained as a guide to the trade Every effort has been made to be as accurate as possible.

			(Per Bag 154/158 lbs) (Per bushel)
	the never	Tax et al	13.00— 14.00
Other varieties Rice Per Boiled	***	***	12,00-
Country Rice No		***	80.00
-Country Rice No.	2		98.00— 100.00
-Samba Rice	DE LUY	14	90.0 — 95. 110.00—115.00
Kora			115.00—120.00
-Maize I	Per Cuil.	***	25.00- 26.00

TEA REPORT

Auction No. 2 held on 10th and 11th January, 1972.

The total quantity offered was 9:491,714 lbs. comprising 5,107,379 lbs. Leaf Grades, lbs. 2 Reprints, 103,662 lbs. Ex Estate. Western quality again showed little improve ment and there was only fair demand at lower rates except for a few of the best coloury High Growns which sold at improved prices.

High-Grown Teas: opening, there was only hes opening, there was only hesitant interest shown and except for a few good liquoring coloury Brokens which were firm to sometimes dearer, the plainer light liquoring teas declined irregularly between 20/40 cents per pound for both BOPF's and BOPF's. OP's were again easier while Pekoes were irregularly easier in Main Sale. irregularly easier in Main Sale Catalogues.

Medium-Grown Teas: These declined irregularly, the better liquoring sorts easing by 5/10 per pound, while the plainer types lost a few cents. BOPF's were up to 10 cents lower, OP's declined further while Pekoes were a few cents easier.

Low-Grown Teas: Small Leaf BOP's and BOPF's met keen interest at the beginning of the Main Sale but black BOP.1's and OP's came to an easier market, declining by 5/10 cents and 15/25 cents respectively. Pekoes were a few cents easier.

Tippy Teas: Best FBOP's ere 5/8 cents and the less showy sorts 10/15 cents easier. Attractive Small Leaf FBOPF's were about 30/40 cents lower while the very showy teas were mainly 50/75 cents easier except for a couple of very tippy teas which obtained enhanced prices, one of which created a

new record of Rs. 66/- per

Commodity Commentary

Off Grades: All Fannings were in strong demand and moved up by 10/20 cents per pound. The liquoring BM's and BP's were about 10 cents dearer, while the corresponding Low Grown's were easier by 5/10 cents per pound....

Dusts: There was strong

Week-ending 9th January, 1972

RSS NO: cent easier at 70 cents per lb. but declined gradually there-after in line with overseas advices to close at 681/4 cents per 1b.

Approximately 624 Tons of LATEX CREPES were offered at the Two Sales held during the period under review, a slight increase of 19 tons compared to the previous week's total. At the First Sale, best latex crepes were marked down by 1/2 cent per lb. but the FAQ offerings were 1/2 cent per lb. better. Duller and inferior grades too improved by 1 to 2 cents per lb. At the following Sale, all latex crepe grades met with a generally easier market and were consequently quoted 1 to 2 cents per lb. lower.

Lack of overseas buying in-terest and possibly the in-creased freight rates brought about by the currency adjustjents, were cited as the prin-cipal factors for the easier, conditions in this market.

Approximately 111 Tons of SCRAP CREPES were offered, a decrease of 21 Tons compared to the previous week's total. At the First Sale, light, dark brown and dark scrap crepes encountered good ge-neral demand and were marked neral demand and were marked up by 1 to 3 cents per lb. Flat Bark, however, declined by 2 cents per lb. At the follow-ing Sale, light brown scarp crepes declined by 1/2 cent per lb. but the dark brown sorts improved further by 1 cent per lb. Barker offerings, however, were unchanged to however, were unchanged to I cent per lb. lower. Flat Bark was irregularly dearer.

Approximately 11 Tons of SOLE CREPE were offered during the week under review, a substantial decrease of 8 Tons compared to the previous week's total Once again de-mand was centred on the Smooth 3/16" thickness which sold at fully firm to slightly dearer rates. In the absence of FAQ 1/8" and 1/4" offerings,, these dimensions were unquoted. Poorer sorts and miscellaneous thicknesses sold as between 80 to 98 cents per lb

FROTH AND CUTTINGS opened easier at 53 cents per lb. but recovered thereafter to close at 55 cents per lb.

CURLY AND SHELL SCRAP NO: 1 opened about unchanged at 45 and 4 cents per lb. res whilst the respectively and Curly grade remained unchanged, Shell Scrap No. 1 improved to close at 44 cents per lb.

Export Duty

The Export Duty for the period 10th/16th January, 1972 will remain unchanged at 3 cents per lb., which is the present flat rate of duty. Cesses also remain unchanged at 19.80 cents per lb.

The improvement in the Cocoa The improvement in the Cocoa market continued with little more interest and No. 1 quality was quoted at Rs. 141/- to Rs. 145/- per cwt., an increase of Rs. 10/- to Rs. 15/- per cwt. Below best grades were also dearer at Rs. 100/- to Rs. 115/- per cwt. whilst darker and poorer sorts too improved to between Rs. 40/- to Rs. 80/- per cwt. to Rs. 80/- per ewt.

Coffee: Approximately 36 cwts. of Coffee were on offer withRobusta fetching Rs. 300/per cwt. and Dealers' quantity being sold between Rs. 210/to Rs. 225/- per cwt. Two attractive lots of Arabica Coffee were withdrawn due to lack of suitable bids.

Pepper: 3,157 lbs. of Pepper were on ofter and the market was Unquoted due to lack of suitable bids. One lot of very inferior Pepper dust was sold at -/50 cents per lb

Produce Report

Week-ending 9th January, 1972

Cardamoms: There was no Sale held for the week ending 2nd January, 1972 and with 11,338 \bs. of Cardamoms on offer during the week under on oner during the week under review, there was an appreci-able increase of 6,269 lbs, compared to the previous Sale. In spite of increased quantity on offer the market however steadied at previous levels and

Cashew

Per lb.

once again was quoted at Rs. 10/- to Rs. 11/- per 1b. Rs. 10/- to Rs. 11/- per 1b. Next best grades too remained unchanged at Rs. 7/- to Rs. 9/50 per lb. whilst Off Grades committed to be quoted at Rs. 6/- to Rs. 7/- per lb. Seeds weaker and dropped to be tween-11-50 to 12-75 per lb.

Cocoa: Approximately 128 cwts. of Cocoa were on offer, a substantial drop of 403 cwts.

uses	moxi banana Per C	WI
Red Gram —Toor Dhat)	oddien ex .est of 40.50	
Black Gram (Undu)		accordin
Bengal Gram	46,00	
Green Gram	53 50	
Bombay Cowpea		
illets samuel (a)	Per Bushel	
Finger Millet (Kurrakkan)	12.00-	12 4
Sorgum	Unquoted	
Soya Beans	850.00	(per ew
ices Condiment	Per lb.	
Mustard	6.00- 6.25	
nillies	Per Cwt.	
Dried Long	370.00—	375.0
Dried Round	Unquoted	
Off Grade	Unquoted	
Goraka	78-80.00	95 ()
Vanilla Per lb	Markin dabba misd	
	100.00—	1050
Ground Nuts Per 80 /b	60.00	#U5.Q

Foreign rubber markets in December 1971

The Malaysian Rubber Board continued in their inquirries for RSS 2, 3, 4 & 5 for first half December delivery, without apparently getting much reaction from sellers. Activity on the whole remained thin with the Indo/Pakistan conflict having no visible effect on the market. Conditions were stalemated primarily following the announcement by the USA of an intention to devalue the Dollar by an unspecified amount. Shippers were, therefore, unwilling to make offers until the actual amount of devaluation was known.

The possibility of a resumption of the Dock Strike in the USA in mid February, when the Taft-Hartly Act cooling off period expires, was another restraining factor. Consequently during mid month Singapore rubber values registered the lowest point for some 22 years of 84.50 cents per kilo or 37 3/8 cents per lib. Trading continued to be hampered by currency adjustments and the closing of foreign exchange markets following the devaluation of the U.S. Dollar by 7.9 per cent on the 19th instant together with the seasonal unwillingness to open new commitments before the New Year.

The feature in the shipments was the continued demand for all SMR's excepting the latex grades, with the bulk of demand emanating from the USA and the shipment periods being apparently designed to beat the possible resumptoin of the New York dock strike in mid February.

Caution was the key factor in the London rubber market, in view of the currency and political situations and the possible effects on the commodity. At the outset the market was barely maintained with prices skirting around this year's low level of 12.85 Pence per kilo but there after sentiment took a turn for the better, largerly as a result of sellers reserve in the face of attempted short covering and selective buying.

The US decision to devalue the dollar has a mixed reception but little apparent effect, although there was a perceptible hardening of values. The GSA announcement regarding the reduction of stockpile releases in the New Year to 4,200 long tons monthly against 6,000 tons previously, seemed to have been mostly discounted. The close was quite possibly due to the

continued Christmas and New Year shut down of factories but values continued to be steadily held.

Quiet and featureless conditions prevailed in the New York rubber market in view of the uncertain International Monetary situation and the Far East political developments. Trading was brought to a virtual standstill during mid month following the announcement to devalue the Dollar by an unspecified amount whilst source offerings were scarce as shippers seemed inclined to hold off on the assumption that some action will be forthcoming in the currency situation. Fairly good demand was reported following the devaluation of the US Dollar by 7.9 per cent on the 19th instant but soon thereafter a pre-holiday atmosphere prevailed and consequently trading became of ce again extremely light.

Geylon rubber statistics Jan - Oct 71

RUBBER PRODUCTION

in Ceylon during January/ October, 1971 picked up to 116,078 tons compared to 125, 055 tons during the corresponding period in the previous year although still showing a substantial decrease of 8,977 tons.

CONSUMPTION OF NATURAL RUBBER during January/October, 1971 show-

ed a further improvement at 4,002 tons compared to 2,940 tons during the corresponding period in the previous year, a substantial increase of 1,062 tons.

ACTUAL EXPORTS OF RUBBER during January/October, 1971 also gained ground to 126,064 tons during the corresponding period in the previous year but still a substantial decrease of 8,994 tons.

PLANTATION INDUSTRY

Trends in world rice production

After four consecutive years of record rice production world output is expected to decline in 1971-72, but rice traders continue to be worried about surpluses and weaker prices.

The U.S. Department of Agriculture, analyzing the world rice situation, reported recently that production to the control of th

"The increased rice out put, coupled with lagging import demand, has resulted in a buildup of irice surpluses" Department of Agricu'ture official said.

Within the last year, rice carrying increased by more than 20 per cent, primarily reflecting a buildup in Japan's stocks. Japan, facing a burdensome surplus disposal programme using outlets for feed, industrial use, and exports.

"Japan will have export difficulties since its surplus is mainly short grain rice. Most import markets prefer jong or medium grain rice,

Also the world price is more than half of Japan's support prices".

Price decline

In discussing the world price situation, the Department of Agriculture official in Washington said world trade prices have declined 30 per cent since 1967 to the low levels that prevailed in the early 1960 s

With lower world prices and heightened competition, exporters have increasingly used subsidies or shipment under special terms to hold or gain markets.

Recent increases in rice production in the far East, whch accounts for over half of the world's rice imports have sharply reduced world trade.

World rice production could decline in 1971-72, As usual, the weather will be the major determinant

In Mainland China, out put is expected to be low from last year's record because of less favourable climatic conditions. Japan's 1971 rice crop may fall about 10 per cent as result of the government's programme to cut acreage and production to bring supplies in better balance with demand.

EXPORT INTELLIGENCE

JETRO TRADE FAIR

The Total Annual Budget allocation for JETRO Trade Fairs for the year 1971 - 72 (March-April), is Yen 660 million or approximately Rs. 11 million and not Yen 1,000 million as reported in our issue of 2.1.1972.

COMPANY MEETING REPORTS

The Economic Times regularly features Company Meeting Reports.

Annual Reports of Companies may be addressed to:

Editor, (Company News)
C/o. The Economic Times
(1st Floor,)

157, Jayantha Weerasekera Mawatha, Colombo 10

Export Opportunities

The following foreign firms are interested in importing from Ceylon the products indicated below:-

M/s Dofur Milg & Co., 86, Bd de Sebustopal, Paris 3c,

France.
Textile products.

Mrs. Donald Taylor, Lantone, New York, N.Y. 15091, U.S.A.

Fabrics, unusual- Hand printed and hand woven.

M/s. T. Blackledge & Sons Ltd., Park Mills, Chorley, Lancashire, England.

Woven cotton fabric, loomstate or bleeched.

M/s. Momodu Amedi & Sons 103, Railway Ime, Odi-'Olowa, Mushia, Lagos, Nigeria.

Textiles, ready-made garments, wears, head ties.

Scheme to boost exports of developing countries

From the begining of 1972 developing countries wishing to trade with Britain can benefit from preferential concessions under which they can export almost all manufactured products to the British market entirely free of duty.

Outside Europe, the concession applies to all the industrialising nations of Africa, Asia and Latin America, other than the Communist countries and Taiwan. It gives effect to a British offer, made generalised tariff preferences to manufacturers from developing countries.

Infant industries to gain

The thought is that this will assist infant industries in those countries to build up their potential by manufacturing for an international market, instead of operating relatively inefficiently to supply a local market under the shelter of high tariff walls.

The trade effected by the British concession should be considerable. If it had been in force in 1967, for example, the scheme would have been given duty free entry to over 670 million dollars' worth of imports into Britain from developing countries who were not members of the Commonwealth. That year over 1,000 million dollars' worth of manufactures entered Britain duty-free from

Commonwealth developing countries under existing preference arrangements.

Britain is offering duty free entry on a range of proces-

sed agricultural goods, such as bone meal, currants, tomatoes and fruit and vegetable juices, confectionery, cocoa pow der, biscuits and cakes.

SHARE MARKET REPORT

There was moderate activity in the Share Market, especially in tea, Tea-cum Rubbers and Commercials, according to the Report of the Colombo Brokers' Association for the week ended January 13.

	Previous -	Jan. 13th	+ or-
	Price	1972	
	Rs, cts.	Rs. cts.	Rs. cts.
Teas	10 stream		
Ceylon Provincials	5.25	3.50	- 1.75
Doomoos		4.00	50
Glasgons		4.25	
High Forests		4.00	2.00
Lucky Lands	1.90	1.40	50
	6.00	1.40	- 1.50
Uva Ketewallas	4.50	5.00	+ .50
TeacumRubbers	ult out a clu		1100 1100
Pelmadulla Valleys	5.00	4.75	25
Wellenduras	3.75	3.00	25
Neuchatels	3.75	4.00	+ .25
Rubber			
Clunes		10.50	- 1.00
Cevlon Breweries	12.50	9.50	- 3.00
Ceylon Cold Stores	13.50	10.00	-3.50
Browns	10.00	9.25	75
Ceylon Silks	5.00	6.50	+ 1.50
Rowlands		3.00	No In lead
Wellawatte Mills	5.00	6.50	+ 1.50
Commercial Banks	5.75	5.25	50
Caraille	6.00	6.00	
There was no business in I	reference Sha	ares and G	overnmen
Lange			

The following were quoted ex-dividend: Alliance Finance Co. Ltd., 5% Interim an 31.1.72, Arpico Finance Co, Ltd. 5% Interest on 31.1.72 Welimada Tea Co., of Ceylon Ltd. 3% Interim on 20.1.72.

Company Meeting Reports

Commercial activities retard

The Annual Report and balance sheet of M/s Richard Pieris & Co., Ltd. for the year ended 31st March 1971, was until were called upo tabled recently.

The Chairman pointed out that severe retardation of the company's commercial activi-tes was reflected during the

The Net Profit before Texation for the year ended 31 march 1971 is Rs. 1,092,843. This cumulative effect is in marked contrast to the re-sults achieved in the two previous trading years and is in fact the lowest profit recorded by the Company during the last decade.

Total turnover declined by Rs. 2,386,421 from the previous year but Employment Costs, Administration and Establishment, Financial and other Overhead Expenses in creased by approximately Rs. 800,000. These combined factors perhaps more than any other contributed signifiother contributed signifi-cantly towards the end result.

Excerpts from the Chairman's statement analysing the acti-vities of the Company on a sectional basis are given below:

The factory and its Sales ad-The factory and its Sales adjunct were called upon to sustain and recompense for the shortfalls that were prevalent elsewhere. They were not equal to an unequal task. However, with the other sole exception of Steel and Aluminium Products all other operations recorded satisfacoperations recorded satisfactory increases, the most notable of which were Arpihyde (artificial leathercloth) and Rev reading. The decline in the sale of Aluminium Products could be wholly attributed to a recurrent shortage of raw ation.

	1970-71
Rubber Products	6,099,178
Plastics &	cut, conglet
Rigifoam	1,504,495
Arpihyde	1,676,116
Steel Furniture	809,454
Steel & Aluminium	nather author
Products	1007,080*
Retreading	2,777,956
All products &	
Processes	13,064,825

The rate of growth in the past two years has been con-sistent, though not spectacu-cular. Though sales have increased by Rs, 1416,747 or 12.16 expressed as a percentage, the trading proft from this diversified source has declined by nearly Rs.300,000 due to marked increase in labour and other direct costs. We have already taken meaningful steps to rectify these deficiencies and I am sure that there will be aradical improvementin profitability in the year 1971/72

Motor Division

The operation of this sector slumped dismally to a low ebb when compared to the previous years. Other than an increase in turnover derived from repairs to Motor materials during the year. I shall tabulate the detailed sales for comparison and evaluated the sales of Motor Vehicles declined by as much as 46.% while the turnover from Spare

	ecrease	per cent
5620,079	479,099	8.52
1,389,053 1,360,736 761,331	115,442 295,380 48,123	8.31 21.39 6.32
1,069,437 2,166,122	(62.357) 611,834	5.84 28.25
11,648,078	1,416,747	12.16

the 1960s. Its share had risen from 10.2 per cent in 1964 to 14.5 per cent in 1969.

Assuming that Britain maintains a 15 per cent penetration of world markets, annual production sales of some £ 860 million by 1980. would not be unreasonable. "From this it does not appear that any further reduction in the UK

Because of its European lead in technology and productive capacity, Britain should where-ever possible, initiate major new projects and draw in part-ners subsequently. At the same time, the report says, the in-dustry "reaffirms its faith in collaboration in Europe, though it recognises that op-

The Society says the industry should vigorously pursue three major developments to establish its long-term position in civil aviation. First, it must exploit its supersonic knowploit its supersonic knowledge because the demand for fast long-range air travel will

Intercity travel by aircraft of this kind offers the most promising field for the growth of air travel over the next two decades," predicts the report.

Parts dipped sharply by Rs 1,426,746 or 23% when com-pared to the previous year partment with the Tyre Retre-The detailed results are as fol-

Townson Townson To			decrease	centage	
	1970-71	1,969-70		7	
Motor Vehicles	1,025,889	1,883,155	(857, 266)	(45.53)	
Motor Vehicle	STEEL STOR	Marie II	1.426,746		
Spare Parts	432,7814	625,4560	The second second	(22.79)	
Motor Repairs	951.285				
Lubrication	ornela decorre	managet	100,027	17.24	
Service	280,627	287,040	(6,413)	(2,23)	
Total	7,085,912	9,222,810 (2 126 909		
attle a Montality	131123712	J, WELE, 010 (4,150,090)	(23.17)	

Attendant with the cumulative decline in turnover of corresponding deterioration in profitability, which inevitably profitability, which inevitably left its stamp of adversity on the net profit of the Company as a whole for the year ended 31 March 1971 with consignments of spares now coming in after a long period of time I am hopeful that sales during 1972 will pick up appreciably and that the position will progressively improve, As for motor Vehicles, I see no future for Vehicles, I see no future for marketing and sales unless the Government changes its fundamental policy in regard to the importation and distribution of this important commodity in whatever form it deems best for the long term economic growth of the country.

Tyre Sales Department

This will perhaps be the last time that I shall be able to outline this sphere of our activity as a separate entity With the State Trading Corporation being vested with the sole authority for the importation of tyres and tubes, it

Tourism

FIRST BATCH OF

The New Year began on an

TOURISTS

optimistic note for Tourism by

two of West Germany's leading

tour operators-Touropa Schar-

The first batch of tourists

The first baten of tourists to arrive in Ceylon in the New Year, came on a Condor Flight on the 2nd of January. These 125 tourists, booked by Touropa Scharnow and Trans Europa and mainly from West

Germany, today the biggest revenue earner for Ceylon from tourism. The local agents for

these tour operators gave the first batch of our 1972 tourists

a very special welcome with Kandyan dancing and 'Wel-come' banners at the Bandara-naike International Airport on

The combined efforts of

these three tour operators are directed towards bringing in 3,000 tourists to Ceylon during this Winter Season, lasting until the middle of April.

TOURIST ARRIVALS UP

Tourist arrivals in Ceylon

which had been on the increase

during recent years, rose by a near 118 per cent in 1969-70

This is revealed in the latest

Tourist Board Report released

Sunday.

recently.

now and Trans Europa.

partment as from 1 Apri 1971. As could reasonably be expected, we achieved a total turnover of Rs. 3,427,700 for the year under review as opposed to Rs. 4,747,264 for the year ended 31st March 1970.

partment with the Tyre Retreading Department to form a newly constituted Tyre De-

increase/ per-

The deficit was nearly 28% approximately Rs. 1,320,000. I expect the sale of new tyres and tubes to further decline to an extent whereby it would have been decidedly uneconomic and non-viable to have retained the set. retained the status quo as existed hitherto.

Aluminium Agency Department and Aluminium and Industrial equipment workshop.

From the realization of total sales of just over one million rupees for the year ended 31 March 1970 the combined turnover dropped to Rs. 826,024 for the year under review. The deficit of nearly 22% amounted to Rs, 227,040 This shortfall is primarily attributable to an inadequacy of raw materials particularly of raw materials particularly aluminium, and it will be difficult for us to arrest this deteriorating situation unless we are provided with the requisite support.

(Contd on page 12)

According to the report the country had experienced this since 1967 then on statistics had been1967-23,666 to urists 1968 - 28272 and 1969-40,204 In 1969 earning through tourists had totalled 280,000 dollars. This is equivalent toRs. 17 million in Ceylon currency.

Under the tourist development plan of the Board it is hoped to provide 2,400 additional hotel rooms for tourists. This will be increased to 5,129 rooms in 1976.

BEAUTIES OF THE WORLD IN A NUTSHELL

The 4th year of the International Festival of Tourist Films-Tourifilm - will be held in Spindleruv Mlyn, the famous mountain resort in the Krkonose (Giant Mountains). northeastern Bohemia, from September 13th to 18th, under the slogan "The beauties of all the world in Spindleruv Mlyn."

The event is organised by the Czech Committee for Tourism in co-operation with organisations of tourism from the socialist countries. So far, 14 countries have entered 52 films into the competition

Shipping & Aviation

MERCHANT MARINE OF CMEA COUNTRIES

is increasing with each passing year. In 1955 its total tonnage was 2.5 million tons of deadweight while in 1970 it reached 17 million tons. This growth was achieved largely through the development of ship building n CMEA nations and mutual deliveries. At present the merchant marine of CMEA countries is the youngest in the world and is up to the key requirements of the scientific and technological revolution, Hence its growing importance in sea navigation.

The shipyards of socialist countries have done much in recent years to standardise the transport, fishing and auxiliary vessels they build. Their number has been cut from 60 to 18. Specialisation in ship building has had the effect of increasing the economic efficiency of the marine. At present work is underway on such problems as increasing the speed of vessels, using economical main power units, automating production processes and applying durable and light materials in ship building. The shipyards of socialist

At the same time the capacity of ports is being increased, and port approaches deepened. New specialised wharves to handle bulk and liquid cargoes have been built in recent years. The technology of loading and

unloading operations is being improved. A synthesis of advanced experience in ship re-The capacity of the merchant marine of CMEA countries service life of the ships. (APN)

BRITAIN'S AIRCRAFT TECHNOLOGY

Just as the United States Just as the United States dominates the space field so Britain has a "marked lead" in other a aerospace activities such as vertical take-off, civil supersonic flight, quieter engine technology and blind landing, says the Society of British Aerospace Companies, in a news report just published in report just published in

The report, called "A Future Plan for Britain's Acrospace Industry," represents the views of some 400 companies in an industry that employs over 210,000 people, and has an uannual turnover of more than \$600 million. Half of than £600 million. Half of these sales are to other coun-

The 16-page document, which has been submitted to the Government, makes it the Government, makes it clear that Britain must exploit its technological leads. It says the maintenance of a viable aerospace industry enabled the country to preserve a degree of independent defence capabilty and to further the growth of advanced technology industries on which its economic future must inevitably depend.

World trade

The Society said the UK air-craft industry had increased its share of world trade over

labour force can be expected if these targets are to be achieved," says the report. says the report.

portunities for collaboration with US firms will also occur."

fast long-range air travel will continue to grow. Secondly, it should press ahead with quiet engine technology to meet the demand for much quieter aircraft of all kinds. New types of quiet aircraft should include the medium-capacityfour engine long-range aircraft and an economic feeder line aircraft to supersede the large number of propeller-driven airliners now in service throughout the world. Thirdly, there was a big potential for aircraft with a shorter take-off and landing capabilty in the immediate future and for short and vertical take off planes in the longer term.

OBAL

Japan's textile industry gets special

assistance

Assistance measures for the Japanese textile industry were decided by the cabinet. Coping with changes in the economic environments of the industry resulting from the limiting of textile exports to the U.S., the Japanese Government will implement the following measures to restructure the textile industry: Assistance measures for the

1. In order to eliminate excessive facility and equipment of the textile industry of Japan, the Government will purchase, from textile busi mess which are bound to close their business in the coming year or two and scrap facilities and equipment such as cotton and staple fibre looms, like and man made fibre fooms, woolen and worsted fooms, beam looms towel looms. woolen and worsted fooms, hemp looms, towel looms, ribbon looms, string looms knitting machines, textiles twisting machines, fasle textile twisting machines, fasle textile twisting machines, spinning machines, dyeing equipment, etc. For this purpose, the Government will expend about Y37.7 billion US \$110 million

Care will be taken by the Government to ensure the effec tiveness of the purchases

The Government take measures to obtain neces-sary operating funds of 65 billion from the Central Bank for commercial and Industrial Cooperatives, the People's Finance Corporation and Small Business Finance Corporation Y10 billion from the Long-Term Trust Bank to befinanced to the textile businesses which would be affected by the limiting of textile exports to the U.S. Government will adopt measures to reduce interest burdens on those businesses.

3. In order to ease the guarantee of the liability in regard to the financing describregard to the Financing described in 2 above, the Government will make additional funds available in the amount of Y900 million to the Textile Industry Rationalization Agency.

4. When Industrial cooperatives and the like organizations may carry out surveys on trends in overseas markets, textile industry policies of fore-ign countries, on new pro-ducts and technology necessary to cope with trends and demands of fashion and sophistication, the Government will establish special funds for that purpose in a total amount of Y 1 billion.

he Government will a deferred repayment The measure in the range of two years in regard to funds for structure-strengthening of the Small Business Promotion Cor-

DINAR AND INTER-NATIONAL PAYMENTS TRAFFIC

Belgrade

The National Bank of Yugoslavia has taken the first step towards introducing the Yugoslav currency, the dinar into the international payments accomplished by allowing foreigners to have accounts in igners to have accounts in dinar in Yugoslav banks, which they will be able to convert under certain conditions, into hard currences.

The possibility that a foreign partner has his dinar deposit means that he may sell his goods for dinar on the Yogos-lay market, to deposit dinar on an account in a Yugoslay on an account in a Yugoslav

bank that he may buy for them Yugoslav goods for his needs or to convert them into hard

According to Lazar Janicic, change department of the National bank, this is one of many measures aimed at consolidating the dinar on the inter-national market and making it convertible.

The new regulation enables foreign partners to meet with the dinars from their accounts in one of Yugoslav banks the needs of others abroad. The Yugoslav banks will be authorized to grant to their foreign partners credits in dinars. In Yugoslavia starts way linking herself with foreign countries over the banking institutions. It is believed that

this is one of the ways from stimulating exports and tradein

stimulating exports and trade in general.

SOVIET VEHICLES FOR SOMALI

Mogadishu

Contracts for the sale of Soviet motor vehicles and spares have been signed In the course of two years the Soviet Union is to deliver 440 motor vehicles to Somali. The contracts also make provisions for Soviet deliveries of garage equipment without compensation.

assistance has also been signed. In keeping with it, Soviet In keeping with it, Soviet specialists are to arrive in Somali to train garage personnel in handling new types of motor vehicles. (TASS).

CHINA'S POWER INDUSTRY TOPS 1971 STATE PLAN Peking

China's power industry completed the 1971 national state plan 15 days ahead of schedule. The increase output set an all-time record, surpassing that of 1970 by 18 per cent.

The workers, cadres and technicians of the industry achieved this under the gui-dance of the line of unity for victory of the ninth national congress of the chinese com-

congress of the chinese com-munist party.

The party committees led workers, cadres and techni-cians in making a serious study of works by Marx, Engels, Lenin, Stalin and Chairman Mao, while carrying out educa-tion in ideology and political line.

Many power plants brought therole of veteran workers and technicians into fuller play, who made technical innovaon power-generating equip-mont in a well-led and planned mont in a well-led and planned way. This enabled many plants to increase output. The volume of power obtained this way in 1971 was equal to more than-half t ast year's output of newly commissioned equip ment. (Hshinhua)

we make an infernal nose— such is the slogan of many revolutionary—minded indivi-duals who have been caught up in the mealstrom of events and who have neither theoretiand who have neither theoretical principles not social roots". He emphasized that a genuine revolutionary Party should alrevolutionary Party should always warn against adventurism and ruthelessly expose expose illusions', ...which inevitably end in complete disappointment... we must bear in mind that any popular movement assumes an infinite variety of forms, is constantly developing new forms and discarding the old, and effecting modifications or new combina modifications or new combina tions of old and new forms".

The experience on non-capitalist development has al-The experience on non-capitalist development has al-ready revealed several of its specific features and laws, among which the most impor-tant law is that the non-capitalist development in asia and Africa is invicibly proceeding along an ascending curve

SOME FEATURES OF NON-CAPITALIST DEVELOPMENT

The non-capitalist develop-ment is a path of advance of countries and peoples towards socialism, at the foundation of which lies the common ownership of the principal means of production and exchange.

In the economic aspect, socialism is a highly develosocialism is a highly develop-ped society of advanced Science and technology. Naturally, therefore, it is not possible to build a socialist society in the countries of age old backwardness, in a short period of time.

Creation of Pre-requisites

First of all, it is necessary to create the economic, 'social and cultural prerequisities for building socialism. The creation of such prerequisites is a common law of non-capitalist development of those countries which have already built a socialist society, by-passing the capitalist path of development as well as of those countries which have now taken the path of building socialism. At the same time the paths of development towards socialsm have their own specific features

At the beginning of the twenties, when the Central Asian republics took the nontwenties,

capitalist path of development the Soviet Union was the only country which was building socialism. Its socialist eco-nomy was just then gaining momentum. It had no expri-ence in socialist construction. The international position of the Soviet state was extraordinarily difficult. It had to build socialism under the con-ditions of capitalist encircle-ment. That was why a ment. That was why a characteristic feature inherent in the non-capitalist develop-ment of the Central Asian Republics, stemmed from those Republics being in a system of a single socialist state which ensured them complete security from foreign invasion and from internal counter-revolution. In these regions, the process of creation of material and politicreation of material and political prerequisites for socialist construction, proceeded very rapidly. That was because, the more highly developed Social republics (the Russian Federation, the Ukrainiaan USSR and others) provided all the necessary economic and finan-cial assistance to these regions ending their backwardness.

Afro-Asian situation

The Asian and African countries that have chosen

the socialist path are in a different situation. They are not yet de-linked from the international capitalist division labour, from the world capita-listmarket. Further more, many of them are still greatly economically dependent upon that market, and linked with it market, and linked with it through hundreds of economic ties. This fact, of course, impedes the process of creation of material prerequisites for building social sm, as imperiali-sm sets in motion all means in order to undermine and to overthrow the progressive re-gimes in Asia and Africa.

By Vasili Solodovnikov Member of the USSR Academy of Sciences

In the struggle for socialism, there are other difficulties also which are specific for Asian and African countries. For instance, the ideological pressure of imperialism on them. Herein lies the cause of anti-Communist inclinations of some leaders of revolutionary democracy, which is causing a serious damage to socialist orientation, undermining the cause of social progress.

In each Asian and African country non-capitalist development has its specific features which depend upon the level of its economic development, the historical and cultural traditions, etc.

Inspite of all historical and national specific features of Asian and African countries, the non-capitalist development in these countries at present, as well as in the Soviet Central Asian republics and Mongolia in their times, has demonstrated the existence of a common law without which it is impossible to successful by preceed to socialism. In the development of the Soviet Central Asian republics took place along the non-capitalist path within

the frame work of a single social list state, which was an advan-tage to them, then the Asian and African countries of socia-list orientation likewise have a no less important advantage, which is necessary for their successful advance to socialism That advantage lies in the successful advance to socialism
That advantage lies in the
existence and strengthening of
the world socialist system
which together with the forces
that are fighting against imperialism, detemines the main direction of the world social
development.
The revolutioners democra-

development.

The revolutionary-democratic leaders of Afro-Asian countries of socialist orientation have begun to accomplish the task of complete political and economic liberation of their countries from imperialism. They are achieving the liquidation of the position of imperia-They are achieving the liquida-tion of the position of imperia-ist monopolies, the building of an advanced national eco-nomy on the basis of the de-velopment of anti-capitalist state sector, the overcoming of colonial heritage in the sphere of services and in socio-economic relations, and the solution of the agrarian ques-tion in the interests on the in the interests on the peasantry.

Multi-stage process

The advance of Asian and African countries to socialism, by-passing capitalism, is a multi-stage, progressive, revolutionary process of implementation of anti-imperialist and general democratic, transformations which step by step takes the country to building socialist society. And this is a specific feature of the revolutionary struggle for socialism in Asia and Africa. Not to take to into consideration means to attempt to jump over the The advance of Asian and to attempt to jump over the intermediary transitional stages and to accomplish socialist tansformations at once, with-out the necessary preparation, and thereby to certainly harm the revolutionary movement.

About such ultra-revolution-Lenin wrote



PROBLEMS OF INDUSTRIALISATION

The three basic objectives of industrialization policies in any country are to provide work for the growing population, to raise the standard of living by increasing the per capita income and also to improve the balance of payments situation.

The economic growth of a country as a whole depends on the efficiency and the growth of individual organizations, and it is difficult to discuss these three ablestices. cuss these three objectives separately as they are interdependent and depend on the social and economic structure of the country.

Today in Ceylon it has be-come very necessary and pro-bably fashionable to be greatly concerned with the role of industrial and agricultural or-ganizations for the welfare of gantzations for the weather of the nation. The government has indicated the need for great emphasis on industry in the means to diversify the economy which involves an increase in the outul of the products which are already products which are arready available in the country, also the production of entirely new products. The constraints within which we have to work are: (a) Capital and labour available, and (b) The producti-vity of the labour. The latter of course can, to a good extent, be influenced by the degree of mechanisation.

Dual Economy - Its Importance

Statistical figures of the per-centage of agricultural and non agricultural population for ad-

vanced and developing countries show that wealthier countries, have only a smaller proport-ion of their working population ion of their working population in agriculture when compared with the developing countries. Labour productivity and hence the advantage level of wealth tends to increase in proportion to the degree to which mechanisation could be applied to production. The prospects of application of advanced production techniques generally tend to be greater in non-agricultural than in agricul-tural countries. Thus in all tural countries. Thus in all economies the manufacturing section tends to be the most dynamic element. The developing countries have realised this and have come to believe that agricultural development alone is not enough to ensure an adequate growth of their economies.

Economic Environment

Government policies have an important bearing on the problems of industrialization. Government can only create an environment conducive to development e.g. by suitable import and exchange controls, concessions, preferential treatment of reinvested tax treatment of reinvested profits and flexible deprecia-tion rates. The Government Control usually depends on the internal economic and finan cial situation and cial situation and on value judgements as represented by the declared policy of the political party in power and amended by the way this policy is acually carried out in practice.

R. RAJESWARAN B.Sc. (Fng.), Dp. Tech.Sc., M. Sc. (Eng.), M.I.PROD., A.M.B.I.M. Assistant Director -(Standardisation)

Bureau of Ceylon Standards

Until recently industrial development has only played relatively minor ro in Ceylon's programm relatively in Ceylon's programmes for various reasons. The Go-vernment has now created the economic environment for development of industrial projects in both the private and the public sector, as this is the best way we could solve many problems existing in the country, by utilizing indigenous talent, know-how and equipment equipment.

Industrial Engineering

The business of producing the right article and selling it to the customer at the right place, at the right time and at the right price consists much more than transforming of more than transforming of raw materials into final pro-

•In involves the consideration and study of a wide spectrum of interlinked and interdependent parameters like ependent parameters like ground, together with man, machine, material, money and method, the 5 Ms as a production engineer would call Extended. tion engineer would call. Ex-pansion of trade under conditions of competition is possi-ble only if the quality of pro-duction offered, meats a fixed and the control system adop-ted ensure constant quality of production.

Standardisation, a specialised branch of production engineer-ing, is the "process of defining and applying the conditions necessary to ensure that a given range of requirements can normally be met with a minimum of variety and in the basis of the best current techniques." It is felt that

well as indirectly to the solution of many problems in main-tenance engineering. Standar disation of vegetable and allied food items should enable the housewives to select food items of desired quality which is very important to a develop-ing country, improving the nutritional status of the coun-

The above few points give the importance of a standardi-sation which could prove as

cient way and o channe finances, so that wer a p they at least break ever this simply this simply pens is a for higher Productivity raise output with saving hours, material, machine, pace in manufacturing, pace in manufacturing, merce, transport and adition. This calls for impindustrial enginedring to ques and equipment affall forms of production te (e.g. metal removal, for and casing processes rol wire and tube drawing, and friction walking beautiful processes. and friction welding, bra and soldering, polymer

DEVELOPING

developing countries should take advantage of the principles of standardisation from the carliest stages of planning, designing and establishing of industries. When the necessary research and feasibility studies have been prepared and the entire production set to a standardisation procedure, it is feasible and profitable to introduce the elements of standardisation in the industrial and his increase administration. trial and business administra-and in similar management control procedures. Standar-disation has proved very useful in all these fields too.

It has also been found that standardisation also reveals in-digenous resources to help the country's industrial program-me. It also helps towards me. It also helps towards import substitution for impor-ted machinery, equipment and parts. Standardisation also could contribute directly as

trial development and econo-mic upliftment of a developing country like Ceylon.

State Industrial Corporation and Productivity

The State Industrial Corporations are an important sector of the national economy. They were initiated and developed. to provide the most basic needs of energy, products and

The economic values of investment in the public sector cannot always be measured in terms of financial returns. Many investments also products a balance of social costs and benefits which taken into and benefits which taken into account, provide a good eco-nomic justification for them. Thus state corporations are theoretically designed to meet the demand for their products

neering etc.) ass amblyproc work study the inques, vengineering, improved ning scheduling and con factory design, enlight maintenance policies and terial handling and impr human relations

EC

The above mentioned cesses and techniques emb most aspects of producengineering which again engineering which again short embraces the three b elements - design, product organisation.

It is at this stage that should ask ourselves, 'have reached the technological m rity to apply these mod techniques or investigate i the necessaity or even the p bility of applying these mod techniques? If so, why some of our State Indust Corporations so ineffici-planned badly, need alway consultant from abroad, n

The Management of Professional Work (Part 1)

There are certain clear trends in American industry today. Authorities point in turn to fundamental changes in product and process technology, to greater size and scope of commercial enterprises, to planned eliminination of routine, repetitive jobs and similar phenomena. These have indeed had, and will continue to have, significant effects on the objectives and output of our business institutions. But one trend—the improving level of education in our work force with a concurrent increase in the numbers of professional workers—has supplied the impetus for dramatic changes in management methods.

In earlier years there was a tendency to put the few "true" professionals into a separate engineering organization or laboratory and provide them with a special work climate designed to encourage productivity and creativity. This climate usually permitted considerable freedom from factory rules and discipline, and encouraged individual exploration of interst andwork experimentation. Professionals were not subjected to the standard personal practices which guided managerial relations with other employees. As a result, the professional's working life was much envied by those who could not share it because they did not possess academic credentials.

Today's situation does not permit such differentiation, Many of our nation's products and projects are highly complicated and require employment of large numbers of scientists and engineers as well as lawyers economists, psychologists and the like. Their talents can no longer be isolated, because they are required in all functions and at all levels of a business. Psychologists, for example, working on proper positioning of instruments for easy viewing by aircraft pilots, may

be found in design or in manube found in design or in manufacturing engineering. Scientists engaged in process industries are quite likely to be a part of the production organization. Engineers may be found in quality control. Moreover, we consider management itself to be a profession and, as offanization, have grants. as organizations have grown in size, it is common to find common layers of manage-ment so that all individuals reporting directly to one manager may be managers them-selves.

Nor is professional work limited to the college graduate. The tool designer who completed high school may struggle with new concepts as part of his job, in solving his particular problem, may push back knowledge frontiers. Indeed, if we examine the work of the technician, the inspector, the secretary the maintenance man, or almost any job within the secretary, the maintenance man, or almost any job within the industrial set-up, we can identify parts of it which are clearly professional. They deal with new information or new relationships between previously known facts. They Involve ingenious problem solution by the worker who must decide for himself when the resultachieves what he is trying to

do. This possibility of innova-ment of self-imposed standards to meet work needs is very desirable for the growth of a business as well as for the growth of the individual. But growth of the individual. But it clearly prevents relegation of professionals to a single organization with an environ-ment especially created for them. It makes it necessary to manage in a way which to manage in a way which encourages professionalism among all workers rather than among a few who are selected.

INDIVIDUAL VS CORPORATION

There are two dilemmas in this, however, Professionalism implies complex subject matter and personal determination to push back knowledge frontiers with respect to it. It also implies the ability to set sound standards for one's work and to make objective, unrelenting measurements of accomplishment against these personal measurements of accomplishment against these personal standards. This is not to say that either the desire to add to knowledge or the level of the standard is derived in a vacuum. Quite the contrary; information contributing to both comes from many sources—parents; professors, distinguished performers in a variety of fields, associates, managers and many others. Once accepand integrated within the individual and formulated however, they become a highly personal statement of personal statement of one's self. It is this sensitive identity with work which needs recognition, under standing and nurture in order to give the professional full expression

within the industrial frame-

arren By manage



Marion S. Kellogg

Miss Marion S. Kellogg is a consultant in marketing manage-ment development at the General lectric Company's New York Electric Company's New York City headquarters. She was formerly an instructor in physics at Brown University. She has been with G. E. since 1944 in various supervisory she has been with G. E. since 1944 in various supervisory capacities. A former mathematics and physics major at Manhattanville College, she has an M. S. degree in physics from Brown University and has taken specialized psychology course at Union Codege, Miss Kellogg is author of four books. "What to Do About Performance Appraisal and "Closing the Performance Gap" were published by the American Management Association. "Putting Management Theories to work" and "When Man and Manager Talk" were published by the Gulf Publishing Company. But an organization cannot live with totally disparate indi-vidual goals. There must be a wholeness, a unanimity of direc-tion if corporate objectives are to be reached.

This, then, is the first dilemma, ably predicted by the social scientists of our 20th century: how to integrate personal professional commitments with those of a business organization without critical sacrifice on their side.

And the second follows the first. Innovation involves both risk of failure and a time investment. For its financial health, a profitmotivated business enterprise depends on a continuing array of goods and services which are efficiently produced. This means that not all work can be new, In every job there must exist, along with the professional content then, a body of repetitive work which is associated with high productivity. How to balance the two efforts appropriately? How to provide a climate which encourages personal creativity without sacrifice of the needed productivity?

No single management tool or process supplies a perfect answer. But prominent theorist and social scientists have been giving us important insights into ways of accomplishing the desired result. One recommended method is a system of delegation which is usually called "Management By Objectives." It reinforces so well our American concept of the

free enterprise system it has been widely accep and applied. And initial res really exciting!

'We'll first review the p cess briefly and then descr some of the necessary mana rial skills and attitudes wh make it effective.

PREREQUISITES

First of all, there are certa prerequisites if Manageme By Objectives will work. T first essential is that the indidual striving towards objective is on a reasonably well-define job which matches his abilit his training and experience his interest, and his level maturity. Wir but, this, the problem becomes be of structuring the high properly or retraining the man or searchin for another man rather than human motivation. human motivation

The second essential is the the firm has corporate objectives and a business plan for moving toward them. Suc a plan entails not only the goal to be achieved by respective businesses, but the strateg decided upon for reaching the identified goals. Without this unifying force, delegation becomes a managerial whim opreference.

The third essential is that the objectives, goals are strate gy have been communicated at least on a need-to-kny w basi throughout an organization Obviously, if adequate communication is missing a least one of the communication is missing a second control of the c

Contd. on page

y at least break even. All simply a us is asking higher processivity - to e output with saving manners, material machine, time, in manufacturing, competent and administrial engineering technical engineering processes rolling, and tube drawing, prestriction welding, brazing oldering polymer engineering polym oldering polymer engi-

I services in the most effi-nt way and by hannel their ances, social wer a period, y at least break even. All simply at us is asking simply at us is asking our Prime Minister while add-dressing a management collo-quium at the Auditorium of our Prime Minister while add-dressing a management collo-quium at the Auditorium of the Central Bank recently, specifically pointed out that "in many cases, the sorry state of affairs in Corporations is due to corruption" The author's industrial experience and exindustrial experience and experience in productivity studies show that similar errors also exist in small, medium and large industries in advanced countries, However, it must be pointed out that the prob-lems and errors pertaining to

process within it is regarded as a 'System' and these various system are analysed separately. This analysis of a system is becoming a specialised subject in itself in advanced economies under the name of Operational Research, Management Information Theory, or System Analysis, which warrants sophisticated data processing and computation depending of course on the size of the organisation and feasibility of such studies.

In a country like ours where

In a country like ours where the industries are intheir in fa-ncyand evaluating these prob-lems we are facing and fighing against are inevitable. This does not in any way mean that we should lag behind in applying wherever possible the techni-ques which are at our disposal developed and implemented successfully in advanced coun-tries.

Costly experience of industrialization during the past few years calls for more realistic and practical solutions at both top management and on the shop floor level. Communication from the shop floor to the top management and mututhe top management and mutuWith democratic socialism, we need self reliance in our-selves. At this stage we must also realise that our economy is not yet fully in our hands. In recent years many countries other than Britain, have tended to increase, their control in our economy.

Unemployment has now created an enormous problem.

created an enormous problem:
Solving this problem would give the country's youth more hope for the future. A full employment programme would possibly involve sacrifice, expecially choselling at his 6. possibly involve sacrifice, ex-pecially chanelling public funds to creating jobs. This can only be done at the expense of pri-vate and public spending. The more the people are prepara-to accept increased taxes of reduced subsidies. The greater reduced subsidies. the greater the number of jobs that can be created. In addition to this:

(1) We must take advantage of the highest possible utili-sation of Ceylonese experts whichwill effect in a gradual replacement of foreign experts.

perts.

(2) Massive policies of development in agricultures should of increasing productivity as well as providing employment opportunities, by expanding the public industrial sector can so that the public sector serve as an axis for the industrial development process in the as an axis for the industrial development process in the

country.

The rate of economic growth would thus depend mainly on the ability and the speed at

which we can absorb and adapt modern technical and managerial knowhow.

Can we be Optimistic?

It is very clear that economic progress will greatly depend on the inflow of technical know-

progress will greatly depend on the inflow of technical know-how and equipment together with international aid both in the form of financial and technical assistance.

The massive British invesment all over the world in the 19th century proved that the private investor could play an important part in the transformation of a developing nation. The advanced countries besides their commercial interest should be happy to see the, poorer countries prosper by giving massive loans on moral of political grounds.

The World Bank provides long-term loans either to government or to private business which are able to obtain a government guarantee. The World Bank also has considerable amount of technical expertise and will examine and comment on any capital plan it may be asked to finance. This is a very valuable service to an under developed country with very few local experts. It is an accepted fact that we lack the necessary technical know-how, competent personnel, training facilities and re-

know-how, competent person-nel, training facilities and re-sources and that the implemen-tation of industrial and manage ment engineering techniques is difficult in practice, no mat-ter how diligently and sincerely

the implementation is attempted. The problems may be more basic, difficult and pulsaps without answers validation our social environment. The progress in manageral soptimizations can be slow, but will result in success with peristent and continuing effort.

One of our environmental obstacles to be overcome is the slackness in work. This atmosphere engenders an easy

the slackness in work. This atmosphere engenders an easy going attitude which avoids working too hard and opposes attempts on the part of management, to increase efficiency and hence productivity. In In effect, current attitudes to as the industrial atmosphere is gradually being substituted for the more traditional subsistance, rural way of living. To tance, rural way of living. To handle this the management has to become aware of the need for constant change and should think in terms of new techniques, which will result

should think in terms of new techniques, which will result in improvements in efficiency. In conclusion, in spite of all these problems we can say that the Industrialization of Ceylon, has been very encouraging. We have gone to the extent of exploring export possibilities within a few years of industrialization with success-very encouraging indeed. The industrianzation with success-very encouraging indeed. The general picture is then of con-fidence and enthusiasm, with the prospect of more and more inflow of technical know-more inflow of technical knowmore inflow of technical know-how equipment, better indus-trial and management engineer-ing techniques, international aid both in the form of financial and technical, foreign invest-ment - with the intention of increasing productivity. pros-perity, and most of all stabiliz-

perity, and most of all stabiliz-ing our economy. (The views expressed in this article are the personal views of the author and has no rele-vance to his official position)

at \$2.3950 for sterling. As can be seen, this operation yielded the arbitrageur 4 per cent.

A different approach would have been to buy the 12 - months silver in London at 182d without purchasing the resulting sterling ahead, and selling 12 - months silver in New York at 1.8560. By leaving these two operations until their New York at 1.8560. By leaving these two operations until their respective liquidation 12 - months hence, the arbitrageur was going short of sterling at a premium of about 2 percent over the dollar. In effect, he was going short 12 - months sterlingat \$2.447 such short sites starting at \$2.447 such short sites sterling via silver were often done at times when there was the expectation of a devalua-tion of sterling against the dollar.

What new protection?

Regardless of the future readjustment of world currencies, the international buyer or seller of metals will have to find new protection in his contracts against possible fur-ther fluctuations of exchange rates. This will be a task which will complicate the metals will complicate the metals business substantially and it will take a long time to get the metal industries to agree on protective clauses that would remedy some of the risks and satisfy both parties to contracts. The problem is that there is no longer a currency which can be used as a standard against which as a standard against which to measure the others. A gold clause which will base the currencies on the free gold price might be one possibility.

(Courtesy National and Grind-lays Review)

ECONOMY

g etc.) ass a blyprocesses study the inques, value ering, improved plan-cheduling and control, design, enlightened nance principal and ma-nanding and improved relations

above mentioned pro-nd techniques embrace spects of production ring which again in ring (which again in inbraces the three basic design, production, tion.

at this stage that we sk ourselves, 'have we at this ass, 'have we ske ourselves, 'have we the technological matuapply' these modern es or investigate into es or investigate into applying these modern es? If so, why are our State Industrial tions so inefficient, badly, need always a nt from abroad, need

erprise system that een widely accepted ied. And initial results citing!

first review the pro-ly and then describe he necessary manage-and attitudes which effective.

EREQUISITES

all, there are certain tes if Management tives will work. The ng towards objectives asonably well-defined matches his ability, ing and experience, will be a less than a separative to the common of the comm

ond essent is that has corporate objec-a business plan for oward them. Such oward them. Such ieved by respective s, but the strategy pon for reaching the goals. Without this force, delegation be-managerial whim or

alone.

notivation

and essential is that ives, goals and strate-been communicated a need-to-know basis at an organization, if adequate com-a is missing align-personal goal with the organization is question. an organization.

a highly industrial country cannot be compared with that existing in a developing eco-

Management System Analysis

Any industrial or managerial Any industrial or managerial organisation is a mixture of administrative, technological social and psychological processes. These parameters are so interwoven that the process overlie and interpenetrate each other in complex ways and situation is difficult both to understand and control for the ation is airrican both to under-stand and control. But the situation can be ayalysed; understanding and hence con-trol of it is made if easier each

the top management and mutu-al trust is very necessary toge-ther with discipline among all ranks including those at top management level. The experi-ence and mistakes of the past which has resulted in labour unrest, unnecessary strikes and in restrictive practices will mean nothing unless lessons for the future, are learned.

Commodities in a floating world

WHY EXCHANGE RISKS ARE GREATER FOR MARY PRODUCERS THAN THEIR CUSTOMERS

The floating of the world's leading currencies has increased both the costs and risks of trading in primary commodities and on balance this works more heavily against producers than consumers. This articles seeks consumers. This articles seeks to explain why. It concentrates on the machanics of trading in metals, by way of illustration, but the principles and mechanics apply more or less to trade in all commodities

There are important implications for primary producers her, quite aside from the large threat of the payments crisis to the world economy and the economies of developing coun-

tries in particular.

In the first place, it has now become far more difficult to find some unit in which to quote world commodity prices. Quotation in terms of a fixed dollar, or gold, or even some unit of account, provided a reasonable safeguard so long as exchange risks were confined mainly to isolated currencies. protection available when nearly all major currencies are fluctuating widely, and al-though this theoretically puts producers and consumers at equal risk, in practice it has so far worked against the so far worked against the producers. Even before the currencies crisis came to a head, a gold guarantee on price was incorporated in many agreements. But in the event, the dollar (and hence monetay gold) have depreciated against the weighted average of world currencies.

Secondly, the more common and wider flucuation of currencies has made it more necessary to cover exchange risks; and because floating has tended to produce larger forward spreads as well as bigger dealing margins on the exchanges, it has tended to push up the

ost of covering exchange risks. But here again, producers are penalised relatively more than consumers, because producers selling in many markets often need to cover exchange risks in a larger number of currenin a larger number of curren-cies than purchasers. More-over, primary producers tend to have rather less expert re-presentation in the world's main financial centres and this adds further to their difficulties in a newly compli-cated world.

Now, for some more detailed explanations, contributed by an international trader in New

York.

London quotations

The international trade in lead, zinc and copper, tin, lead, zinc and silver is centred in London, and the London quotations rule the prices of these metals for practically the whole world, except the US. This is because, with the exception of silver, these metals were opened to international business on the London Metal Exchange shortly after the war and were kept internationally free, even at the time when severe restric-tions were imposed on sterling and on the foreign trade of the

The LME quotations are sterling quotations and, for. the purpose of international trade, they are converted into local currencies as needed. In the US, the necessity of convert ing these sterling values into dollars, became more pro-nounced as local American markets followed the lead of the LME. They developed the lead of the LME. They developed their own large operations and arbitrage became a daily and voluminous activity

It was not immediately understood by metal trades that currencies are a com-

that this currency commodity has to measure the value of the metal commodities. For this reason, the translation of LME quotations into curren-cies other than sterling was originally taken rather lightly. It took some time for the average metal trader to realize that he needs two rather than one market protections for his metai. The weakness of sterling against the dollar and latter against some other European currencies during most of the 1960s forced the recognition of the basic fact that the metal values were at the mercy metal values were at the mercy of the currency fluctuations as well as the metal fluctuations. It is thus that first the large operations—in metals, and soon thereafter the medium-size ones, started taking an interest in foreign exchange rates not only for the international business in metal but also for hedge and arbitrage requirements in the absence requirements in the absence of actual foreign transactions. Position-taking in a metal re-quired an actual or a paper position-taking in sterlingwhen ever the trading firm was located outside of the sterling area. As time went on, some metal films became quite sophisticated in foreign exchange

operations and recognized that they were dealing in other than metal commodities, in addition to the metal trade. Over the years, some metal firms acquired specialists or even opened special currency departments which went departments which went beyond the hedge requirements-in currencies which were need ni de their normal operations. The field extended to clearing currencies which eventually an abled trading firms to realize metal operations that would one should buy, for example, copper at a local price which would normallytranslate \$1 and sell it for \$30.98 on another market, while still making a profit on the operation through currency arbitrage.

Currency arbitrage

An interesting aspect of the more orthodox currency arbi-trage appeared with the bullion brokers' silver quotations, as price were announced for spo three months' six months and 12 months, Arbitrage was possible for the same or even longer periods on the Commodity Exchange (Comex) in New York, so that an arbitrage in silver could be calculated in two ways, one as a metal arbitrage and the other as a sterling — dollar arbitrage. This was mostly of interest when future sterling was at a substantial discount against the dollar.

Totake a specific example. On a given day, the bullion brokers may have been quoting 170d for spot silver and 182d 170d for spot silver and 182d for 12-months delivery. Sterling may have been \$2,3950 for spot and \$2.3600 for 12 months. The corresponding values in \$ would have been, therefore, \$-1.6965 for spot Silver and \$ 1.7897 for 12 months silver. In other words, the future premium on either

months silver. In other words, the future premium on silver was expressed in sterling as 7.1 per cent, while the same premium expressed in dollars a troy ounce was 5.5 per cent.

In New York, the equivalent prices on the Comex were \$ 1.6950 for spot and \$1.8560 for 12 - months delivery, meaning that the futures were at a premium of 9.5 per cent a year over spot.

The siver arbitrage consisted in buying 12 -months silver in London, purchasing the neces-sary sterling at \$2.3600, selling the silver in New York for 12 -

months delivery and, to estab-lish a proper 4 corner arbitrage, buying spot silver in London, immediately convert-ing the proceeds from the London spot sale into dollars

have seemed impossible other-wise. Through some clearing operations (settlements under bilateral payment agreements)

Opportunities for Small Industrialists

The amount of rubber absorbd by the fabric is governed by the concentration of latex compound, the speed at which the labric passes through the bath and the pressure exerted by squeezing rolls on the fabric. Highly deputed compounds satisfy most requirements.

Coating of fabric is different to that impregating or clothing in that the compound does not reach the bath of the fabric reach the bath of the fabric although even coating may result in some degree of penetration. The same principle in the preparation of fabrics for impregnation applies to coating with latex. Coating unlike impregnation calls for latices of the highest possible concentration and high viscosity, which is often raised by addition of thickening agent or large amonunts of fillers.

Latex Compound preparation

The dry powders of B (See formula guide) are wetted with the water plus dispersal LN solution. This paste is slowly stirred into A. The mix is then brought to the required viscosity by addition of the vulcastab TM solution C. The quantity depends upon the amount of natural stabiliser in the latex and upon ultimate viscosity required and must be determined by small scale experiment. Care should be taken during thickening operation to avoid introduction of tion to avoid introduction of air bubbles.

There are two reasons which make high viscocity desirable in coating:

1. High viscosity prevents deep penetration of compound into the fabric.

2. A few treatments of possibly single treatment is sufficient to apply the desired weight of coating material

To ensure good adhesion to the fabric by coating opera-tion when both sides of the fab-ric are coated, coating can be preceded by impregnation with a diluted compound.

The coating itself can be carried out in a spreading machine and better with a floating blade or brushes or rolls. The vulcanisation is similar to the operation with impregnated cloth or solution.

Spreading, Drying and Vulca-nising

The thick mix is spread on cloth under doctor blade using the spreading machine and dried out slowly to prevent formation of pin holes.

Building up of the desired thickness may require the application of several separate coats, each being dried, but-not vulcanised before application of the next. To obtain good adhesion of the coating, the first aver should have a relatively low solids content of about 50%. Pigment may be included in the compound for only the last coating.

Drying of each coat is effec-Drying of each coat is effected by passing the cloth over a steam chest of steam drum. The cure is carried out by festooning the spread cloth in an oven in an atmosphere of steam or hot air. The cured spreading is usually dusted with tale of steach.

Doubling

Doubling is combined coa-ting and bounding process, In the wet process a single fabric is coated on one side only and while still in the wet state joined to an uncoated fabric by pressing. In the dry process two fabrics each of them coated on one side are joined by being passed through doubling rolls but not until they have been dried. Doubled labrics are waterproof. They

are used for rain wear, etc. After doubling materials have been dried at 60-70- C they are cured in dot air at 100- C for 30 minutes.

Rubberised fabrics are fre-

quently after treated by being exposed to approximately 2% chlorine solution; bromine in carbon tetrachloride or to chlorine water. Within few min-

utes these solutions must be

washed away with water as

as ageing properties may be impaired. The cured sheet usually

dusted with tale or starch.

(Solution spread (Calendering)

0 25

100

2.5

8

4

1.5

Vulcanising 12 Vulcanising 12 Vulcanising 13 Vulcanising 13 Vulcanis 13 Vulcanis 12 Vulcanis 13 Vulcan

A. 60% DRC concentrated latex

50% Sulphur dispersion

5% Dispersal

LN

China clay

Nonox NS Pigment

1% Disper-

sol LN

B. ZDC Zinc oxide

Latex Compound for Supported Sheets (coated)

167

75

261.

Drying 60-70°C Cure 30 at 100°C in hot air

C. 10% Vulcas-tab TM as required

258.25 256.25

Vulcanising

DEV

100

100

216

0.5

0.75

in auto-

Unsupported

100

10

0.25

25

25

6

1.5

Sheets

Formulae Guides

Solution com-

pound for Sup-

Smoked sheet 100

White factice 10

ported Sheets

Antioxidant ZnO

Stearic acid

Colour

Titanium

Dioxide

Precipated whiting

Soft clay

Paraffin wax

oil

Butyl eight

MBTS

Sulphur

Light mineral

RUBBERISED

nation	nd for	1mpreg-
60% DRC con-	Wet	Dry
atraced latex		100
111% Stabiliser		0.5
(Vulcastab LS 50%ZnO		4 5
50% ZDC		
50% Sulphur	1 4	1 2
25% Antioxi dant 425	14	envil 1
50% China clay	20.0	10
degraphical services	213	120

FABRICS (II)

NOTE: It must be noted that the formulations given here are purely for guidance and actual experimenartion have to be done before a particular formula is used in production.

Rubber Research Institute of Ceylon is in a position to offer preliminary training for persons interested in the manufacture of rubber products.

(a) To test the thicknes: weigh the role of cloth before and after coating. From the S.G. thickness can be calculated.

(b) Evenness: Cut 6" squares and measure thickness b across and along the fabric.

EMPLOYMENT

A MINAL IN DEC. 100	Rs.	Rs.
1 Manager	750	
1 Rubber Tech-	1171	
nician	600	
1 Assistant	500	n -n
1 Clerk	400	
1 Watcher	175	2,425

6 Skilled workers @ % Rs. 8/- per day

4 Unskilled workers @ Rs. 4/- per day 320 1,280 Rs. 3,705

Defects that may arise in the manufacturing Process, Possible Causes and Remedy

Defect

Porosity

2. Plough marks or grooves

- Back marking. i.e. impression of cloth on the rubber surface
- Lamination
- Poor adhesion between cloth and rubber

6. Uneven Coating

Possible Causes

- a. Too rapid drying of surface
- Yoo heavy a coat.
 Too fast and spreading cycle
 Caused by grit filler agglomerates; under mastication
 of rubber; loose fibres.
 High tension of cloth
- Over mastication of rubber If cloth is not completely cold during take up
- Due to curing of rubber under the steam chest.

 Due to damp cloth

 Due to stiff dough not pene-
- trating sufficiently into weave. Insufficient pressure from blade
- d. Due to nature of fabric.
- Worn doctor blade.

Avoid any fillers containing moi sture. Use some CaO to mop up moisture.

After each coating clean the doctor blade thoroughly.

Heat cloth prior to spreading. Adjust viscosity of dough

Adjust blde.

Change fabric or change formu-ation to give better adhesion. Change sides during repeated coating

ommoc

b. Uneven tension of cloth passing under blade.

Latex Compound for Doubling (c) Addesion; Peal test mith

WEI	DIV
Torses	off The
167	100
4	2
3	1.5
) ellinnis	
	111
te 4	avel -
60	40
C)10	smol ho
268	146.5
	167 4 3) 20 tte 4

Drying 60-70 c Cure 30' 100 einhot air

Variable Costs

sile machine at 2"/min."

(d) Porosity Test.

- **EVALUATION** 1. Return on capital employed is 22.2%
- 2. Payback period on
 (a) total capital is 3.8 years.
 (b) fixed capital is 2.6
- 3. Breakeven point is Rs. 194,300/-
- 4. P/V ratio is .295. Profit as a percentage of sales is 16.3%

TREES OF

432,250

127,840

PROFITABILITY STATEMENT

66,500 yds. rubberised hospital sheeting Rs. 6/50 per yard (after allowing 5% for damages)

Kaw material.	Rs.
70,000 yds. of fabric — Rs. 2/- per yd.	140,000
70,000 ibs. of rubber compound	THE DESCRIPTION OF THE PARTY OF
@ Rs. 1/- per lb.	70,000
105,000 lbs, of petroleum rubber	T MI add torons
solvent SPBR @ -/48 cts. a lb.	50,400
acking material.	30,400
Tale Rs. 400	
Other 200	600
Wages per schedule 15,600	Table of the off
E P. F. 1,400	17,000
Electricity - Production at Rs. 300/-	17,000
per month	7.600
Oil - Rs. 100/- per moth	3,600
B.T.T. 5	1,200
	21610 304,416

Oil — Rs. 100/- per moth B.T.T. 5—	21610
Contribution:	-
ixed Costs	
Salaries 2,425 x 12)	20 100
C.P. P. 9	2.620
Electricity (general lighting)	240
Rates, taxes and insurances	2,200
Repair and maintenance	5.200
General expenses	3,000
Depreciation:	3,0.0
Building — 2 1/2% 1,200	OURT THE
Machinery 109/	COLUMN TWO IS

600 15,300 57,460 Net profit before tax : 70,380

SPECIAL CONSIDERA-

Manufacture of hospital sheeting locally would mean a firther processing of locally available materials. Although the chemicals needed for this industry are to be imported, the foreign exchange allocated for this purpose is considered to be negligible when compared to the net foreign exchange saving that would be earned by the production of these materials ocally. It should also be noted that the productor import substitutin and thi project would be economically viable only if the imports of these items are restricted with the development of the local industry. Production for the export market too would be possible if the output is of a high quality.

BENEFITS

The output of units would

The output of units would The output of units would supply the entire local demand for rubberised waterproof material and also provide a gross foreign exchange saving of at least two lakhs of rupees annually. Further, it will also create employment opportuunities for at least 45-60 persons immediately sons immediately.

(AN IDB STUDY (Concluded)

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INDIAN REPUBLIC DAY:- 26-1-1972

22nd Anniversary Supplement THE PARTY OF THE P

INDIA'S FOREIGN TRADE: REVIEW

India's total exports (including re-exports) during the year 1970-71 amounted to Rs. 15307 million as against Rs. year 19/0-/1 amounted to Rs. 15307 million as against Rs. 14132 million during 1969-70, indicating an increase of Rs. 1175 million. The total import stood at Rs. 16282 million as against Rs. 15827 million in 1969-70 representing an absolute increase of Rs. 455 million or in prepentage terms. absolute increase of Rs. 455 million or in percentage terms about 2.9 per cent. The advance data available for April-May, 1971 show the total exports during these two months at Rs. 2593 million and the total imports at Rs. 3035 million.

Table indicates the overall position of India's foreign trade during the years 1967-68 to 1970-71 and the two months April-May, 1971

Export Trade

After a sizeable decline, Indian exports began to pick up after July 1970 and during the months of August and Sep-tember, 1970, there was some increase in exports. This increase in exports. This trend of increase in exports continued in the ensuing months and exports during October, November and December, were substantially higher than those of the same months of the preceding years In fact, during October, 1970 exports from India reached an all-time high figure of Rs. 1560 million. During the month of January, 1971 there month of January, 1971 there was a slight fall in exports to the extent of Rs. 13 million which may be due to the strike in the jute industry

Year

1967-68

1968-69 1969-70 1970-71

April-May 1971 April-May 1970 3035 2644 in December 1970- Exports m December 1970- Exports began to show signs of recovery during the months of February-March, 1971 Thus, though there was some fluctuation in the exports during the year, the overall performas been quite satisfactory in that the country was able to achieve a growth rate of exports to the extents of 8.3 per cent against the Fouth

cent against the Fouth

Plan annual target of 7 per cent. Advance information available shows that there was a decline of 6.1 million in exports during April. 1971 while during May 1971, the exports increased by Rs. 138 million over May 1970

The growth rate of exports achieved during 1970-71 was quite satisfactory. However this performance did not compare well with the increase of 13.3 per cent achieved in 1968-69 over 1967-68. Apart from the dock strike at Calcutta, strained labour-management relations, revival of home demand, shortage of certain essential raw materials like steel, aluminium and other non-ferrous metals, oil seeds and raw cotton and difficult trading conditions faced by two of our most importby two of our most import-ant exchange earners viz., tea and jute manufactures are res-ponsible for this performance in the export field being limited to the present the limited present achievement.

Import Trade

During April-December 1970 India's imports amounted to Rs. 11.840 million as against Rs. 11,720 millon in April-December, 1969 representing an increase of 1 per cent According to broad economic classification of items entering India's import trade, the bulk of imports were made for maintenance of the economy, the maintenance imports

Exports (including re-	Rs.Million Balance of
exports)	Trade
1.11987	8089
13579	5507
14132	1695
15397	975
2593	442
2461	183

accounted for 68 per cent of total imports during April-December 1970 as compared to 64 per cent during April-December 1969. Among maintenance imports, raw materials nad intermediate goods (including metals) elaimed the (including metals) claimed the major share (56 per cent of total imports) as against a lower percentage (49 per cent) in April-December, 1969

while imports of components and spares were 12 per cent during April-December 1970 as against 15 per cent during April-December 1969. Imports of complete machinery and of complete machinery and equipment which are made for development of the economy, work out to 12 per cent during April-December, 1970 as against 19 per cent during April-December 1969.

P. L. SETHI
Asst. Director
Directorate of Research and
Statistics, Office of the Controller of Imports & Ex-

Direction of Trade

As for direction of exports during April-December 1970, India's exports to the North American Region and E.C.M. American Region and E.C.M. declined whereas to all other regions higher exports were registered, There was a sharp decline of Rs. 330 million in India's exports to U.S.A, actual exports being Rs. 1510 million during April- Decmber 1970, as compared to actual exports being Rs. 1510 million during April- Decmber 1970, as compared to Rs. 1840 million during AprilDecember, 1969. This was mainly due to lesser offtake of carpet backing cloth by the U.S.A. The exports to the E.C.M. were slightly lower by Rs. 20 million. The largest increase in exports has taken place to the ECAFE countries to the extent of Rs. 440 million (from Rs. 2660 million to Rs. 3100 million). Most of this increase was absorbed by Jana exports to which increase was absorbed by Japan, exports to which increased by Rs. 330 million (from 1220 million to Rs. 1550 million), owing to higher shipments of iron ores, oil cakes etc. Next to the ECAFE countries, the East European countries have each secured an increase in exports to the extent of Rs. 390 million. In the case of East European countries exports increased from Rs. 2280 million to Rs. 2670 million. Much of this increase was accounted for by the U.S.S.R., exports to that country having gone up from Rs. 1310 million to R 1500 million. ry having gone up from Rs. 1310 million to Rs. 1580 million In the case of African countries, exports to the U.A.R. increased from Rs. 250 million 401 million indicating

a rise of Rs. 160 million. The other African country which was able to absorb Indian exports to a large extent is Sudan. Exports to this counudan. Exports to this country increased from Rs. 120 million to Rs. 260 million. Exports to the U.K. were higher by Rs. 110 million, the actual exports being Rs. 1380 million during April-December 1970, as against Rs. 1270 million during April-December 1969. December 1969.

As for the source of imports As for the source of imports there was significant increase in India's imports from North America, the African countries and the Federal Republic of Germany while decline in imports was considerable from ECAFE and East European countries. The largest in imports was considerable from ECAFE and East European countrues. The largest increase of Rs. 380 million was registered in respect of Canada imports having increased from Rs. 570 million to Rs. 950 million during April-December 1970, from that country. Imports from the U.S.A. were almost the same, the actual figures of imports being Rs. 3441 million during April-December, 1969. The imports from African countries increased from Rs. 980 million to Rs. 1230 million—a rise of Rs. 250 million. Most of the increase in imports from this region has taken place from U.A.R, import from which country increased from Rs. 210 million to Rs. 340 million on account of higher imports of raw cotton etc. Though there was not much of increase in imports from the E.C.M. countries as a Though there was not much of increase in imports from the E.C.M. countries as a group, imports from the Federal Republic of Germany increased by Rs. 180 million from Rs 600 million in April-December, 1969 to Rs. 780 million during April-December, 1970, implying thereby that the imports from some of the E.C.M. countries declined. India's imports from the East European countries sho-East European countries showed a decline of Rs. 390 miljion from Rs. 2060 million to 1970 million. Most of the 1970 million. Most of the decline in imports from this group of countries is traceable to the fall in imports from the U.S.S.R. Imports from the U.S.S.R. fell from Rs 1240 million in April-Decem-ber 1969 to Rs. 780

million during April-December 1970. There was a sharp fall of Rs 210 million in the imports from ECAFE. Imports from this region declined from Rs 2020 million to Rs. 1810 million) mainly from Burma. Thailand, Melaysia and Afghanistan.)

Impact of Britam's ECM Entry

Some significant developments are expected in India's trade with U.K. and the E.C.M. The U.K. Government have decided to impose 15 per cent duty on imports of cotton textiles from India. Further, British entry into the E. C.M. will adversely affect India's export trade as well.

The Commonwealth preferences will peter out and E.C.M. external tariff will be imposed on a number of traditional items. However, exports of our non-traditional items like engineering goods may go up as demand of Western Euroengineering goods may go up as demand of Western European countries for labour intensive items like components of cars of other equipment from India and other countries is likely to grow. Under the Generalised system of Preferences, a wide range of manufactured and semi-manufactured Indian goods have been allowed to enter the European Common Market countries at reduced rates of duty with effect from 1st July, 1971. The duty reductions are substantial in respect of engineering goods and since India is now in a position to meet sizeable requirements of developed countries for a number of items, there is a good scope for India to step up its exports to the E.C.M. Other countries like Japan, U.S.A., U.K. are expected to implement the scheme during this year or next year.

Estimates for 1971-72

It has been estimated that during 1971-72: It has been estimated that during 1971-72 India's exports would go upto Rs. 16,700 million while imports are expected to rise to Rs, 17,100 million It will thus be seen that while imports may increase by 5 per cent, exports are expected to rise by 9 per cent which may be regarded as an encouraging trend. Accordingly adverse balance of trade is expected to be only Rs. 400 million during 1971-72 as against Rs. 980 million in 1970-71



Imports

20070

19086 15827 16282

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BOOM COLOR CONTROL COLOR COLOR

Third Asian International Trade Fair

The Third Asian International Trade Fair, in a way, will mirror the quarter—century of development India has achieved since Independence. It will also show to the world how a once colonised and under-developed nation has overcome problems of resources, racing population increases and many more other obstacles to emerge as a free nation capable of competing with the most developed in the field of industry and trade.

The essence of India's economic progress is reflected in the transition that its production and trading patterns have undergone over the past 24 years. The overall trade of the country went up from Rs. 8644 million in the year of Independence to Rs. 31,588.2 millions last year. In 1950-51, the last of the pre plan period Indias total trade was of the order of Rs. 12508.5 million, including imports amounting to Rs. 6502.1 million and exports of Rs. 6002.4 million. Started in the Korean boom year amidst an inflationary trend, the First Five Year Plan ended in 1955-56, with the country chalking up an average overall foreign trade figure of Rs. 13,192.6 million. The average

for the Second Plan period between 1956 and 1961 was Rs. 15,817 million and for the third plan period (1961-66)Rs. 20,063.2 million.

The statistics also indicate how during the second and third plan periods India steadily built up her imports, in the course of securing the capital goods essential for increasing production which would in turn lead to surpluses for export. The adverse balance which was of the order of Rs. 1175.4 million increased to Rs. 6,028.9 million in 1965-66 and during the current Fourth Plan period dropped to Rs. 975.2 million in 1970-71.

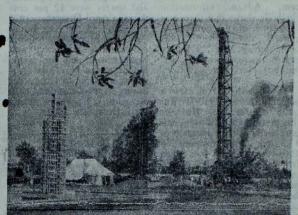
QUALITATIVE EXPANSION

Figures aside, much more has been done to change both the volume and quality of India's foreign trade. From the position of the country exporting mainly primary goods, like tea, are manufacturing cotton textiles and raw cotton which accounted for 60 % of the exports with many manufactured items on the list as also sophisticated engineering goods. Thus in 1969-70 the traditional items constituted a much smaller portion of

India's exports. This is turn has brought about a change in the direction of Indian exports. Instead of being dependent mainly on Britain, India today exports to many countries on both sides of the Atlantic and as many on Africa and Asia.

The range of exports includes durable consumer goods, plant and machinery, trans-

port equipment, heavy electric transmission lines and towers, railway trackmaterial and so on Indian buses are, for example, sold in Aden, Malaysia, Somalia and Thailand. Indian machine tools are marketed in West Germany, Czechoslovakia and the United States. India-made railway equipment is bought by the UK, Hungary, Malaysia and the US. Belgium imports heavy water from this country while the Soviet telephone system depends on Indian supplies.



also sophisticated engineering goods. Thus in 1969-70 the traditional items constituted.

Trade Fair

Trade Fair

cy Resolution. The premable to the Resolution said: "Government is of the view that expansion of export earnings is as crucial for financing the Plan as the mobilisation of domestic resources. To achieve national self-reliance, export earnings need to be expanded at a high rate." The resolution envisaged for the public sector industries a progressively expanding role in this direction.

It is equally significant that

It is equally significant that the Resolution framed after careful consideration of the entire gamut of the countries economic relations with the rest of the world and based on its own experience as a nation struggling for economic recovery, should have paid special attention to the international scene. Thus it called for early implementation of the scheme of the generalised system of non reciprocal and nor discriminatory preferences in favour of developing nations by the developed countries of the world and for the removal of artificial trade and economic barriers placed before the developing countries. Similarly the resolution empahsised "the importance of international cooperation for exports."

WINDOW ON DEVELOP-MENT

It is against this background that India's efforts to increase her export potential and the successes achieved in this direction have to be assessed. For, exports are an essential avenue for raising resources nationaldevelopment, not only for India but for the other developing nations of the world. In this effect India has fully recognised the role of co-operation among the developing nations. Fairs, like the Asian International Trade Fairs, provide a window on the development achived by other countries and a useful forum for planning future cooperation.

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The Dempo Steamships Co. Ltd, Bombay.

Canada imports surgical equipment while Indian sugar and textile machinery is paying an important role in the economic production of less developed countries like Uganda, Kenya, Ethiopia and Nigeria. Indian iron ore is sold on a long term basis in bulk to Japan.

EXPORT POLICY RESOLUTION

Today again as a result of planning, the Indian exports & imports are efficiently planned. In 1970 a further important steps was taken when Parliament adopted the export Poli-

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ENGINEERING INDUSTRY IN INDIA

India is today manufacturing a vast array of industrial goods. The country has attained self-sufficiency in making a number of engineering goods from pins to giant machinery, not only to meet the home demand but for export as well. This has enabled her industrial entreprises to offer goods at competetive prices conforming to international standards and specifications.

From simple consumer goods, export trade in engin-neering items has been gradu-ally diversified to include in-dustrial plants and machinery heavy transport equipment, heavy and light electrical goods, heavy and light struc-tural fabrication, machine tools turn-key projects and other high added value sophistica-ted items. Directionwise In-dian engineering goods are now being exported to almost all parts of the world. Both

with regard to quality and price the engineering goods manufactured in India are increasingly becoming competitive in the world market.

Among the products, that have lately gained firm foot-hold in international markets are railway wagons and coaches, electric wires and cables, steel pipes, tubes and fittings, hand tools and small tools diesel engines and parts, iron and steel castings, industrial machinery including jute, textile and knitting machinery, transmission line towers and poles, wire ropes, telephone equipment, electric fans and sewing machines, steel furniture, agricultural machinery and agricultural implements, railway tracks materials, steel bars, rods, etc.

There is now compulsory en-forcement of quality standards and pre shipment inspection of export products.

More than 85 per cent of India's exports are covered by quality contral and pre-shipment inspection schemes.

Mr. Raunaq Singh. Chairman, Engineering Export Promotion Council, Calcutta

Selection Headstocks Centre and Turret Lathes, Hydraulically Controlled Chukers, All Electric Milling Machines and Transfer lines, Drilling and Boring Machines. With the expertise knowledge gained in design technical know-how, the industry is in a position to manufacture machine tool, as per the customer's requirement.

Indian engineers are now designing, engineering and building an array of sophisticated plants which are winning recognition abroad. Indian technologists are also prepar-

Along the progress of the machine tools, the cutting tool manufacturing industry also developed. Foday there are twenty nine plants in the organised sector besides numerous units in the small-scale sector manufacturing cutting tools. The total capacity of twist drill production is 10 million nos. per year. The capacity for all types of cutting tools is Rs. 15 million and for the Bandsaw and Hacksaw Blades 50 million. Twist and other types of drills can be produced upto a diameter of 100 mm. It addition to milling cutters the cutters with form relief or special cutting geometry are also manufactured.

Threaded tools in cut and ground thread varieties both in Carbon Steel and High speed Steel are made as per the British, American and German specifications

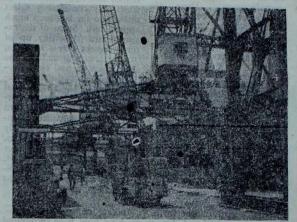
Ferrous Castings

The foundry industry in India developed during post-independence era and more so during successive Plan periods. At present there are nearly 4,200 grey iron and 60 steel and malleable foundries in India. The capacity of the grey iron foundries exceeds one million tonnes and that of steel foundries is around 2, 50,000 tonnes. 50,000 tonnes.

A new field of manufacturing alloy steel castings is recovering greater attention from the industry with the result that austenitic manganese, chrome manganese carbon chrome and nickel chrome steel castings are manufactured in increasing quantities.

A huge steel foundry, which is a part of the Heavy Engineering Corporation's complex of industrial units, has a steel foundry of the capacity 45,000 tonnes a year and the maximum weight of industrial casting it can make, will be 90 tonnes.

(Contd. on page 12)



Picture shows Jute exports from Calcutta Port

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ing feasibility studies or pro-jects reports for giant steel works in Ceylon, Singapore. East Africa and Latin America, They are advising the United Nations for a ferre-alloy facility in Iran as well as offering projects studies and engineering designs to a number of European enterprises.

Indian industries are executing large-value contracts for industrial plants and machinery' structural fabrication, power station equipment and lately Indian consultants have entered into agreements, with overseas parties to assist in planning a capital equipment industry connected with chemiindustry connected with chemi-cal petro chemicals, building materials and refractory materials and industries.

Machine Tools

The production of machine tools has risen from 4.7 million in 1951 to Rs. 258 million which is more than fifty fold rise in period of just less than twenty years. Indian fold rise in period of just less than twenty years. Indian machine tool industry during the first Five-Year Plan (1951-1955) was in its infant stage with hardly three major units making machines to accepted standards of accuracy. An appreciable progress was recorded during the Second and Third Five-Year Plan and the subsequent years 1966-67, 1967-68 1968-69. From a production of hardly Rs 10. 78 million in 1956 the output rose to Rs. 285 million during 1966.

The machine tool industry is capable of evolving its own-designs of general purpose machine tools. More advanced types of designs have also been manufactured success-fully. To name a few of them: Pre manufacturers have specialised and sophisticated plant and machinery, The tools are carefully hardened and tempered in automatic furnaces.

Hand tools from India are exported to over thirty countries of the world including sophisticated and quality conscious markets like the U.S.A., Australia, Canada and Czechoslovakia

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Engineering Industry in India ... The installed capacity of electric power supply which

(Contd from Page 11)

Mechanite Foundries

The Mechanite foundries in The Mechanite foundries in India coupled with their past experience in the foundry field have found access to international markets, depending on their individual capacity and effort to meet the need of the effort to meet the need of the hour. The success achieved by the heavy engineering enterprises like the Hindustan Machine Tools Ltd., Bangalore, Cooper Engineering Ltd., Poona and M/s Central Iron Works, Kolhapur, are equally inspiring as manufacturers have entered into a new drive of expensed into a new drive of exentered into a new drive of exporting mechanite castings to the developed countries.

Automobile Engineering

There are seven large-scale plants manufacturing cars, jeeps and commercial vehicles-light, medium and heavy types light, medium and heavy types Eight other plants make scooters, motor cycles, three wheelers and mopeds. Besides, there are more than 200 manufacturing units in the organised sector which manufacture components for the assembly of complete vehicles as well as replacement of components for servicing the vehicles. These constitue a vast but an intergrated industrial complex for the manufacture of motor vehicles and parts.

The Automobile manufac-

vehicles and parts.

The Automobile manufacturers are making a wide range of items such as shock absorbers, pistons, rear-axle shafts, diesel fuel-injection equipment radiators' engine valves, valve guides and inserts, flywheels, brake drums, leaf springs, dynamos, voltage regulators, hydraulic and mechanical jacks, technometers, dash.board instruments, steel forgings, grey iron forgings, sparking plugs etc.

Electronics

Telecommunication and electronic equipment manufacturing industry in India has

made a promising beginning. The total production of electronies equipment and components during 1969-70 was about Rs. 1,100 million and Rs. 280 million respectively. It is expected to rise to Rs. 2,000 milion for the equipment and Rs. 840 million for components by 1975.

Various types of domestic radios, including multiband (medium wave and short wave portable transistorised radios, radio receivers, record play-ers and radiograms are preers and radiograms are processed by a large number of manufacturers. These are

Electronic components in dustry in India covers a large field of composition; cracked carbon and wires resistors, field of composition; cracked carbon and wires resistors, paper, ceramic, electrolytic, polystryeno polycarbonate film and ganged air-capacitors, micro switches, microphones, loudspeakers, rotary switches, instrument knobs, valve holders, wave guides, volume controls and so forth. These are produced by a large number of firms. Radio receiving valves, small signal, large signal and power-transsistors, zener and other diodes, varistors ahd thermistors are varistors and thermistors are manufactured. A good number of these components are of the professional grade and increasingly used in the ma-nufacture of professional eq-

Engineering Know-How and Consultancy Services

A large number of Indian enterprises are now equipped to render consultancy services in many engineering fields demanding complicated know-how, sophisticated plants, and equipment indigenous design and engineering.

Indian consultancy servi-ces have also been aiding the engineering industry to attain self-sufficiency not only in designing engineering projects, but also in indigenous manufacturers of various auxiliary equipment which were used to be imported.

India has already won substantial industrial contracts in cessed by a large number of manufacturers. These are made from the components/materials which are almost wholly indigenous. Telephone and teleprinter industry are making good progress.

Fiectronic Components

Electronic components in dustry in India covers a large country in India covers a large and the same country in India covers a large and the same country in India covers a large and the same country in India covers a large and the same country in India covers a large and the same country in India covers a large and the same country in India covers a large and the same country in India covers a large and the same country in India covers a large and the same country in India covers a large and the same country in India covers a large and the same country in India covers a large and the same country in India covers and the same country in India industrial contracts in which her consultancy talent utilised so far has been much appreciated. Some of the examples are (i) setting up of three cement plants in Syria, (ii) one newsprint mill in the same country, and (iii) general industrial development work in Iran by India's National Industrial contracts in which her consultancy talent utilised so far has been much appreciated. Some of the examples are (i) setting up of three cement plants in Syria, (ii) one newsprint mill in the same country, and (iii) general industrial contracts in which her consultancy talent utilised so far has been much appreciated. Some of the examples are (i) setting up of three cement plants in Syria, (ii) one newsprint mill in the same country, and (iii) general industrial Development Corporation. Development Corporation. Some of the turn key projects, entrusted to Indian firms which invariably include consultancy services, are (i) construction of power transmission lines in Kuwait, Nigoria and Suda (ii) Nigeria and Sudan (ii) complete sugar mill in Uganda (iii) textile mills in U.A.R.

> Indian consultancy services have now been recognised in overseas markets with competency to offer consultancy services in the following spe-cialised fields.

Thermal Power Plants, Nu-clear Power Plants, Hydro-electric Power Plants, Electricleatric Power Plants, Electrical Transmission and Distribution System, Iron and Steel
Plants, Fertilizer Plants, Cement Plants, Pulp and Paper
Plants, Water Works, Ports,
Harbour, Ware houses, Dams
Bridges, Roads and Buildings,
Architecture & Town Planning
Mining and Mine Benefication
Plant, Material handling Plant
Non-ferrous Metallurgical Plant, Refinery & Petroleum
Plants, Irrigation and Flood
Control Projects and Light &
Heavy Engineering Projects.

Steel Pipes and Tubes

India has some of the India has some of the most sophisticated pipe manufacturing Plants. Some of the tube-mills have world famous collaborators. The tube mills are located near the main markets in India and a few of them are cast based. The industry is capable of covering a wide range of specifications of the end uses ranging from cycle tubes to high pressure boilers and linepipe tubes.

Indian tube industry has already established its competitiveness and quality in foreign markets. Steel pipes and tubes are exported to the U.S.A the U.K. and other countries in Middle East, Africa, Australia and South East Asia.

Electrical Equipment

A large scale power development programme is a prerequisite for rapid industrialisation. Accordingly the development of the installed power generation capacity has been rapid since independen-

was 2.3 million kilowatts at the beginning of the First P an rose to 3.4 million kilowatts, 5.6 million kilowatts and 10 million kilowatts respectively at the end of the Second and Third Plan periods It is proposed to increase the installed capacity to 47 million kilowatts by the end of the Sixth plan.

Electrical equipment manufacturing units located in private and public sector enterprises are making: Electric Motors, High Voltage Power Transformers Generators and Turbines, Power Boilers, Dis_ tributions Transformers, Mo tor Controlgears, Circuit Bre. akers, Capacitors & Conden-Sors' Instrument Panels, Turbine Generators and various other equipment for power transmission and distri-

Besides attaining self-sufficiency in manufacturing power equipment we are exporting electrical equipments to various countries of the world as per the international specifications or custom built to individual specifications.

The export perfomance of engineering goods has been showing steady increase during the last few years: in 1967-68 the export value was

Rs. 415 million; 1968-69 Rs. 850 million; 1969-70 Rs. 1064 Rs. million and in 1970-71 1152 million.

There have been interesting changes in the regionwise picture of engineering goods exports. The South East Asian Markets imported engineering products worth Rs. 18.3 million during 1956-57 and gradually improved their intake to Rs. 44.4 million 1960-61, Rs. 98.2 million in 1970-71. The West Asian markets which absorbed Rs. 20.4 million worth of these products also improved the value of their purchases to Rs. 28.9 million Rs. 72 ses to Rs. 28.9 million Rs, 72 million and Rs. 253,5 million in the respective years. likewise the African markets too improved their purchases from a value of Rs. 12.4 million to Rs. 20 million, Rs. 57.6 million and Rs. 52.6 million respectively. While there was no purchase of engineering products from India by the East European countries in 1956-57, today they buy a value of Rs. 123 million. Interestingly the West European economies which were the least important markets for Indla's engineering items, a decade back, bought as much as Rs. 102 million worth of engineering products in 1970-71. The improvement is in view of their growing realisation of India's comparative costs beinefits in a variety of labour intensive lines of production.

Company Report...

(Contd from page 4)

Radio-Necchi-refrigeration Department

The activities of this relatively small section are worthy of mention not because of the magnitude or spectaeu-lariy of its performance but by the undeniable fact that it recorded increases in turnover and trading profitability during the year ended 31 March 1971 as compared to the previous year.

Exports

Our effort in this vital sphere have been minimal and disappointing in the sense that we have not made any appresible to the sense that we have not made any appreciable headway in our export drive which was launched in early 1970. The first realization on exports for the year underreview is Rs. 112,851 and shows little improvement on the figure attained in the previous year. previous year.

on the figure attained in the previous year.

Being painfully aware of our singular lack of success in this field, we sent our Export Promotion and Merchandising Manager on a 6 week fact finding tour in August of this year. He covered some of the more prospective markets in the Gulf States, Middle East countries and Kenya in East Africa, The initial response has been most encouraging and we gradually expect to convert the several inquiries that we have received for our manufactures into irrevocable orders of supply. It would unquestionably be premature and imprudent for us to assume that we have eaptured these markets in our

first assail but we, nevertheless, share qualified optimism that we have indeed the products and some of the resources that will assist us to effective ly counter competition from other parts of the world in international trade.

The path of success is long and tortuous but if we perser-vere in our endeavours and if the Government will support us to the hilt, I see no logical reason as to why we should not succeed in the long term.

Industrial relations

Recently concluded Collective Agreements with Trade Unions representative of the manual labour catergories have boosted the salaries and Wages bill to a sizeable commitment. The enhanced Salaries and Provident Fund Benefits stretched back to 1 September and Provident Fund Benents stretched back to 1 September 1970 making further inroads into the considerably reduced levels of profitability that pre-vailed during the year under

The total cost to the Company in accountable monetary terms in implementing these Collective Agreements, is in the region of Rs. 423,000 and the major share of this has been apportioned to the year ended 31 March 1971. I carnestly hope that productivity will improve to a level that is commensurate with the substantial benefits that the greater numbers of our work force enjoy under the terms and conditions of the Collective Agreements. The total cost to the Com

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NEW ENZYMES GIVE RUBBER MORE BOUNCE

Pure natural rubber would be an almost perfectly elastic material; you could keep it stretched or squashed for 10,000 years and afterwards it would spring back almost exactly to its original shape.

Real rubber does nt quite live upto this ideal, but the ideal should come a good deal clo-ser with a new kind of rubber. which has its impurities washed out with enzymes. The enzymes are exactly the same as those added to some washing powders. They are extracted from bacteria, and have the ability to break down protein and make it soluble in water.

The latex that comes from rubber trees contains small amounts of protein, and if amounts of protein, and if the protein is removed before the latex is made into rubber the finished rubber has much better mechanical properties-or, roughly speaking, more

Impurities

This isn't quite the whole itory. Removing the protein rom the latex isn't much use other, man-made impurities which affect rubber in the same which affect rubber in the same way are going to be added later. The main culprits in this respect have been the chemicals added in order to speed up the process of vulcanisation, the treatment which turns rub-

Better chemicals for this purpose have been developed by the same organisation which deviced theenzyme treatment-the Natural rubber Producers' Research Association, with laboratories north of London, in Welwyn Garden City, Herfordshire.

The conventional chemicals tend to form tiny crystals the rubber which make its haviour uneven and unreliable: the new chemicals, however, stay uniformly distributed through the rubber.

Both these developments are part of an effort to encourage and designers to use natural rubber where they might have used other materials such as synthetic rubber or even steel. Predictability is one thing angiographic and the state of the s even steel. Predictability is one thing engineers demand, and it's hoped that the new rubber will have properties almost as unvarying as those

Another feature of the new rubble is that it has a much smaller tendency to slowly change its shape under steady stress. So underground pipes sealed with it won't start to leak after a few years; and

ber from a yielding, shapeless mass into a firm, elastic material.

Better chemicals for this purpose have been developed by the case of the control of the

New device to cool cutting tools

new device helping to remove the heat appearing in the operation of cutting tools has been named "heat tube"

Overheating has a bad effect on the durability of the cutter and the precision of the processing of parts. That is wh researchers are constantly look ing for some rational methods to cool the cutting tool,

The "heat tube" proposed by V.N.Yurin, staff mer ber of the Moscow Aircraft Engineering Institute, is of simple design. One of its tips faces the cutting surface of the cutrefractory alloy plate, and the other a cooling condensor. There is no air in the tube, but porous material saturated with some volatile

SCIENCE AND TECHNOLOGY

A modern electric fishing machine

Pink prawns which are in great demand all over the world will in the future also be caught in daylight. This has been made possible by a research collective from the Baltic Sea island of Usedom which developed a plant that uses modern methods of electric fishing for catching this tric fishing for catching this kind of crayfish which up till now could be found only at night.

The new plant which is easy to operate even without spe-cial knowledge was developed by GDR experts for the Cuban fishery. First tests in the Carib-nean Sea brouhgt results that

As soon as the liquid heats in the tube, its fumes begin moving to the cooling zone-to the condensor. Over there they surrender their heat and turn to liquid again which its liquid to the condensor to liquid again which its liquid turn to liquid again which the condensor to the immediately runs in the capillaries of the porous material to the cutter's hot zone. This is a continous process.

(APN)

were twice as high as those reached with the traditional methods

"ECHO II"

Polish experts have made a new model of the radio-tele-phone, called "Echo II" which is helpful in maintaining communication within a range of three kilometres.

The device is of a simple design and is easy to operate It can be used on a wide scale, chiefly for communication in large industrial enterprises on building sites, by service and sanitary aircraft as well as during sporting, tourist and youth events of different kinds.

The device is fed by eight small 1.5 volt batteries or ten miniature accumulators ensuring operation for 10 hours.

Management of professional work

Contd from Page 6

In a given organizational unit, the first step in the process is for a man and his manager to develop a set of standards which represent the acceptable level of performance this year for key ar continuing areas of the man's responsibilities. These standards need not be all-inclusive but should focus effort and attention on the more important duties of the position which will be done year in, year out, regardless of the business plan being fol-lowed. In the case of an engineer such items as technical reports, product tests, specifications and similar items might be included. In the case of a salesman, customer calls, extension of customer credit and orders received with the assemble. A feet of the control of the control of the control of the case of a salesman, customer credit and orders received with the assemble. A feet of the case of might be examples. A foreman might be asked not be exceed certain waste and spoilage limits, to meet cost reductions bogeys and the like. The setting of standards is a holding action designed to prevent slippage in less glamorous but important areas of work where efficiency is critical.

When these have been formulated and agreed to, the second step is to develop goals which the man is expected to achieve within a reasonable time period. The goals re-present his innovative contribu-tion to the desired organization results based on current business plans. In the case of a professional, neither the stand-ard nor the goal setting can be unilateral. Instead, each party brings important, though different, information to the planning decisions. In the manager's case, he is more likely to be aware of business plans or changes in them, and of competitive moves or custo-mer needs which affect the

desired course of action. He desired course of action. He is also likely to know of already established priorities and of resource availability as well as schedule advances or lags in other parts of the organization which relate to the man's work program. work program.

The man, on the other hand, may be far more familiar with the technology in which he deals, with problems or barriers he is facing or anticipates, as well as possible break-throughs. So the conclusions reached should result from a pooling of both parties' information.

For a truly joint decision—one which weighs all available inputs—certain implications are obvious. The manager needs to be interested in the employee's information and in where things actually stand. The closed-minded manager who comes to a planning session with all the decisions made may knowingly or unknowingly block upward communication. He may never ask for it or, if it's given to him he may not hear except through his personal, powerful filters, or his reception of it may be so negative that the employee is disinclined to argue his points or to attempt to where things actually stand. his points or to attempt to present further information on ther occasions.

A manager, therefore, needs to develop certain skills. He must learn to interview, to listen and to interpret what he hears. He must learn how to make it easy for an employee to give him unfavorable information or report a lack of pro-gress. If, on hearing such news, he then loses his temper, he defeats his purpose, of course.

He must tearn to negotiate with an employee who reports to him just as he would with an associate at his own level in the organization of views (often involving a trade-off, a concession on both sides), a better, more realistic plan of action will emerge and both parties will feel completely committed to its accomplishi-

GOALS ARE NOT FIXED

Once strandards and goals have been agreed to, the man/ chooses how he will reach them within the resource and time restrictions which prevail. Inevitably some of the assumptions and predictions made for planning purposes are proven wrong. Perhaps there is a change in the economy or a market shift which was not anticipated. Perhaps some work is behind schedule; some has not even been started because emergencies occurred. Perhaps technical progress has been technical progress has been hampered because of slow delivery of needed equipment.

For reasons such as these, plans cannot be considered fixed for any long period of time. They must be reviewed and recycled at rather frequent intervals. Most companies find a quarterly review to be about the right time period. It is long enough to permit the man some freedom of choice, yet short enough that major events requiring replanning can taken into account quickly.

The review and recycle time The review and recycle time is not a performance appraisal for the man. In fact, it is likely that the manager who takes this approach will lose the constructive thinking of the employee at the time he most needs it. The most successful managers ask, instead, for the man to brief them on where work stands against planned accomplishments and then

quickly turn the discussion quickly turn the discussion into an information exchange and a "where do we go from here?" session, In this way, the emphasis is on the future and the options available to them in order to reach organization goals.

BENEFITS TO THE MANAGER IN THE

What has the manager to gain from this process which in many ways is less efficient than more traditional management methods? He gains, first of all, systematic access to the information the employee possesses. In these days of specialization this is much needed. The employee quite probably possesses better knowledge of the professional content of his work than the manager. work than the manager.

In additon, he comes to an perception of his work and his personal interests with repect to it. Since these matters affect the man's motivation seriously, they are critical to a successful working relationship between them ship between them.

The frequent recycling operates as an early warning system so that the manager is in a position to evaluate the action he must take to ensure success.

Misunderstanding of what is needed are gradually elimi-nated. Difficulty or ease of accomplishment become more obvious so that the risk in involved in the innovative part of the work is controlled. The balance between standards and goals helps prevent achieve-ment of one at the expense of the other.

BENEFITS TO THE PROFESSIONAL

Nor are the benefits all oneside. The professional himself has much to gain. The negotiated plan gives him a voice in

his goals — indeed, provides a way for him to influence the goals of the organization of which he is member In this way, alignment of his personal goals with the organization goals with the organization goals is more likely.

The professional become visible" in the sense that hi visible" in the sense that his role is clearly delineated and he is identified with his plans and accomplishments. His per-formance is less subject to speculation and inference It becomes very clear what he has and has not done.

When evidence is needed on

which to base monetaryrewards or other forms of recognition, it is available—and in terms both the man and the manager

when new jobs open, their requirements can be compared with aman's known accomplish ments in an effort to determine his competitive position with respect to qualifications.

Perhaps the important thing from the professional's view-point is that he agrees to do certain things and he is measured on whether or not he does them.

NEED FOR MANAGERIAL JUDGEMENT

Does this mean that the manager is no longer required to use judgement in measuring the success of a given individual Of course not. But the focus for udgement shifts. He must now weigh such fac-

must now weigh such factors as:

1. Did the plan to which both agreed representconsiderable innovation? Or was it a pedestrian plan, requiring litle ingenuity?

2. Did the man face helpful—or difficult—conditions in attempting to carry it out?

3. Did the plan as conceived reach the intended result for the business?

for the business?

(TO BE CONTINUED)

THE ECONOMIC TIMES

Editorial Department

Sunday 16th January, 1972

(1st Floor), 157, Jayantha Weerasekera Mawatha COLOMBO.10.

" ECHO II"

AID TALKS

The Aid Consortium Meeting to be held in Paris has once again come round the corner, and Ceylon awaits it anxiously or rather feverishly. Mr. Robert S. Mc Namara, President of the World Bank will create an unprecedented visit to Ceylon to obtain first hand information about the economic and political climate in Ceylon before the world Bank could put across Ceylon's case for increased aid to the Aid Club countries.

Inspice of all the talk about self-reliance and less dependence on foreign aid it cannot be disputed that Ceylon must rely on aid and more aid for many more years to come. In this context it would seem heartening that the World Bank chief would apparently be assured of this fact. In the light of falling export earnings, a worsening of the terms of trade and a declining import capacity, pressures for maintaining minimum living standards have increased, thus compelling the country to live beyond its means through the goodwill of the creditor nations.

of the main problems facing the Government is to find external resources to finance the Five Year Plan, and in this respect foreign assistance will necessarily have to play a crucial role.

There is already a backlog of aid amounting to about Rs. 500 million and about Rs. 766 million or one third of the country's total export earnings for the year has to be reserved for debt servicing. It has been pointed out recently that Ceylon's balance of payments position is so week that we only qualify for soft-term loans from the World Bank Group. But as World Bank assistance comprise a blend of both soft and hard term loans, our aid negotiators will have to make a strong case for a larger slice of soft-term assistance.

Ceylon might in all probability have to convince the Aid Club that its economic policy is based on sound principles and that the successful implementatof such policy would enable the country to repay the loan obligations. In other words, like any other money lender, the Group must be satisfied with our credit worthiness. For this the public sector must be geared to meet its rapidly increasing responsibilities. can no longer permit valuable foreign assistance to be fritterd away in uneconomic public sector ventureswastage must be reduced to a minimum and the Government mess ensure optimum utilisation of all available resources. The twin problem of bribery and corruption which is still rumpant must also be eliminated if the economy is to progress at a faster rate.

Efficient utilisation of foreign aid is therefore of paramount importance, but though this fact has been realized it has yet to be practiced effectively—this should be assured before we could think of advancing the day when the country would be freed from foreign assistance when the country would be liceu living which is the dream of all politicians.

Minimising imported raw materials-More research work by CISIR

The Ceylon Institute of Scientific and Industrial Research (CISIR) is being geared to play a major role in the country's industrialisation process. according to a report according to a report just released.

The Institute will carry out research to maximise the use local raw materials for manufacturing purposes, thus reducing the heavy de-pendence on imported mate-

Processes have been developed for improving the char-cteristics of locally available timber and for the separation of high quality oil and protein from coconut. Work is now in progress in the preparation of activated carbon from coconut shells and in establishing uses for chlorinated rubber.

Action has also been taken for the production of substi-tutes for imported wood pulp stamping ink, wire drawing lubricants and foam produ-cing components for fire exA team of Soviet Scientists on the Research Programme was invited by the Government to examine the structure and work programme of the CISIR and to make (ii) Re-organisation of the Research Divisions of the Insrecommendations.

Steps are now being taken to implement these recommendations, the principle features of which are:-

(i)The setting up of a Resear-rch and Planning Council to advise the Governing Board

titute with corresponding increases in staff and equip-

(iii) The setting of an En-gineering Division and

iv) The establishment of Techno-Economic Evaluation unit.

Britain's biggest trade surplus

Britain's external trade sur-plus in 1971 was far and away the biggest she has ever had.

Provisional scassonally adjusted figures published last week put last month's surplus on visible trade at £36 million bringing the total British trade surplus for 1971 to a prodigious £295 million.

In most years Britain runs a deficit on mercantile trade which is offset by a surplus

on the sale of services and and other 'invisible' receipts such as earnings from overtimes in the last quarrer of a century has she been in annual surplus on trade in goods.

Last year Britain earned such a surplus for the second year in succession and in a measure which easily topped her previous peak visible tra-de surplus of £53 million, earned in 1956.

In addition Britain's normal large surplus on 'invisibles' is estimated to have totalled well over £600 million last year. This means that she achieved a surplus on the current account on her balance of payments, which covers all transactions' except capital movements, in excess of 900 million.

Britain's remarkable trade performance last year ref-lected a five per cent rise in the volume of British exports compared with 1970. Higher Brtish export prices increased the effect of this on the balance of payments.

At the same time there was a rather smaller rise in the volume of imports into Bri-tain and an appreciably smaller rise in import prices.

LONDON SPICE CONFERENCE

Ceylon India and Pakistan are among the 30 countries expected to be represented at a five-day conference on spices to be held in London in April.

The conference is being organised by the Tropical Products Institute (TPI), which is part of Britain's Overseas Development Administration, and countries which either produce or use spices will be sending delegates.

Besides the formal papers and discussions at the confe-rence, visits are being arranged to organisatons concer-

HONOURED

Thomas J. Bata, Chief Executive of the Bata Shoe Organisation, has been named a Companian of the Order Canada, the highest civilian honour available to a citizen

The order was created in 1967 by the Honourable Lester B. Pearson, and consists of three awards; in order of their descending importance:

(1) Companion of the Order of Canada
(2) The Medal of Courage
(3) The Medal of Service

The total number of living Companions of the Order of Canada must not exceed 150. Canada must not exceed 150.
The Order was conceived to fill the need for a distinctly Canadian system of honors and awards to be used as a means of recognising outstanding merit, gallantry or distinguished public service in all fields of endeavour. The Metto of the Order is They desire a better country. Awards are made solely on the basis of meris. If conformity with its distrinctly Canadian Character, the Order includes no titles and confers no special privileges, hereditary or otherwise. ned with spices and related subjects. These will include several commercial firms, the Royal Botanical Gardens at Kew and the Industrial Development Department of the TPI at Culham.

Four main sections

Although the programme details are not yet completed it is intended that the conference should be divided into four main sections. In the first section dealings with traditional spices and vanilla there will be a paper by Mr F. Rosengarten Jr. (author of 'The Book of (author of 'The Book of Spices') on the history of spices' followed by a lecture by Mr. H. B. Heath, of Bush Boake Allen Ltd., on the present pattern of use. Dr. R. Hardman, of Bath Technological University, will talk on the spice. sity, will talk on the spice and herbs used in pharmacy. Aspects of the preparation, analysis and use of vanilla will be discussed by other speakers'

The second secton on cultural aspects generally will include specific lectures on the introduction of spice crops-to certain areas, and the cultivation of pepper. Section three will deal with spice processing, flavour testing and the bacterial contamination of spices. Production and quality control of oleoresms(a natural mixture of the volatile oil and resinare other topics to be included. ded.

The fourth section will cover various aspects of mar-keting and the views of the both a major user country in western Europe and a produ-cing country will be presen-

(NOTE: Further applica-tions to attend the conference will be welcomed by: The Scientific Secretariat (C), Tro-pical Products Institute, 56, Gray's Inn. Road, London WC1X 8LU)

E4 M. CREDIT FROM HUNGARY

An agreement was signed between the Government of Ceylon and the Government of the Hungarian People's Reof the Hungarian People's Republic providing for a line of credit in a sum of 4 Million pounds sterling. The Agreement was signed by Professor H.A. de S. Gunasekera, Permanent Secretary, Ministry of Planning and employment for the Government of Geylon and Dr. Karoly Garamvolgyi, First Deputy Minister of Finance, on behalf of the Government of the Hungarian People's Republic.

The loan is repayable in 10 years and is subject to interest at 3%. The indicative list of items eligible for financing under the credit includes: Complete Plant and Equipment for Telephone Exchanges, Machinery for Chemical Industry, Electrical power sub-stations, Refreigeration Pants, Ships and Fishing Boats

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