

Appendix to Chapter 5

Appendix A : "Mutual Benefit Projects".

'Mutual Benefit Projects' which were undertaken by both India and Nepal have benefited them largely. In the post-1951 period, India started many projects in Nepal.

Power generation is a sphere which offers extensive scope for Indo-Nepalese Co-operation. Next to Brazil, Nepal has the largest power potential in the world.¹ There are an estimated 6,000 rivers and streams in Nepal and the total length of these rivers and streams exceeds 45,000 kms. The hydro-power potential of the country as estimated by RME is about 83,400 MW. As against this, the present demand for power both industrial and domestic on the basis of existing distribution lines in Nepal is placed around 300 MW. On the other hand, the power generated in the Kingdom, presently, is hardly 87 MW which is likely to rise to 291 MW by the end of the eighties. With the present installed capacity the per capita availability is below 24 units per year in Nepal against about 175 units per year in India.²

The Kosi Project : The first project undertaken by India was the Kosi project the agreement of which was concluded in 1954.

Kosi rises in Tibet at an altitude of 18,000 feet and flows through Nepal and Bihar before it touches the Ganga near Kursela. Work on the project was delayed owing to the political deadlock of 1960-62. When the Indo-Nepalese relations improved, there remained an impression among the Nepalese that this project was undertaken by India primarily to further its own interest. The economic development of Nepal had not received due attention. Complaints against the project were also raised, on the eve of King Mahendra's visit to New Delhi in August, 1963.

Subsequently, India signed a revised agreement on the Kosi project on December 19, 1966 so that it could be more beneficial to Nepal. Under the agreement, the government of India committed to pay compensation annually at the rate of Rs.5 (NE) per Nepali Bigha for all land that had so far been acquired for the project by India. It was also conceded by India that it would surrender the land to Nepal on which the 'Bund' is situated. Nepal, on its part agreed to permit the government of India to maintain and operate the resources of the 'Bund'. The most notable fact was an explicit understanding between the two countries on the right of Nepal to take over all the properties of the project at the end of the 199-year lease by paying reasonable compensation to India.³

In November 1973 India agreed to give compensation at the rate of Rs.10,000 per bigha of unirrigated lands and Rs.12,000 per bigha for irrigated lands. 280 hectares of lands have been acquired and India will have to pay Rs.4.5 million for the western canal of Kosi Project. The western canal system envisaged irrigation of 7.73 lakhs acres of land in Darbhanga and Monghyr in Bihar and 70,000 acres in the Saptari district of Nepal. The eastern canal system would provide irrigation to 14.04 lakh acres of land in Purnea and Shersa district of Bihar. A power house, with an installed capacity of 18,000 KW has been started in the main eastern canal. India sanctioned Rs.2.12 crores for the rehabilitation scheme of the people displaced by this project.⁴

The Gandak Project : Gandak project was another scheme, the agreement of which was concluded in 1959. It aimed at harnessing the large irrigation and water potential of the Gandak river for the common benefit of India and Nepal. The Gandak Project is located at the trijunction of Nepal, Bihar and U.P. The agreement of 1959 envisaged construction of a barrage across the river near Balmikinar, excavation of the main western canal system, main eastern canal system and construction of a power house in Nepal.

There was no difficulty in concluding the agreements before 1961 except for a few serious anti-Gandak pact

demonstrations. They tried to popularise the view that the agreement represented a sell-out to India since the latter was going to get the lion's share of benefits from a "Nepalese river". This argument was applied with greater force to Kosi project which offered more irrigation facilities to India. In 1954 India itself sought to compensate Nepal by offering to build Trisuli Hydel Station. There was, it was true, no quid pro quo on the matter but the fact remained that Trisuli represented India's "gift" to Nepal for permitting the construction of Kosi headworks in its territory.⁵

However, the Gandak project would afford irrigation facilities to 1.43 lakh acres in Nepal. A power house with an installed capacity of 15,000 kw to be constructed under this project within Nepal, would become Nepal's property along with the transmission lines running through her territory. The annual irrigable area in Bihar from the Canals would be 27.32 lakh acres in Champaran and Muzaffarpur and Darbhanga areas. The power house commissioned 1979, was handed over to Nepal in August 1981. It has already supplied 42.5 million units of electric power to Nepal and would irrigate 60,000 acres of land in Nepal. This has been built by Bihar government on behalf of the Indian government at the cost of Rs.10 crores.⁶

The Chatra Canal : A major irrigation project in the eastern Nepal - the Chatra Canal Project for which an agreement was signed on November 1, 1964 has also been implemented. To meet the Nepalese criticism that the Kosi project gave much more benefit to India than ^{to} Nepal, New Delhi constructed the Chatra Canal in the Kosi basin.⁷ This project is designed to irrigate 2.12 lakh acres of land in Sunsari and Morang districts in Nepal. It has been executed through the River Valley Project Department of Bihar. The construction of the main canal, a branch canal and the head regulator of the project was completed in 1975 at a cost of Rs.125 million.

The Trisuli Hydel Project : Based on the Indo-Nepalese agreement of November 20, 1958, the Trisuli Hydel Project was completed on November 17, 1971. It consists of a diversion dam power channel, balancing reservoir and a power house. This project cost Rs.12.17 crores. The power is being transmitted to Kathmandu Valley through 18-miles long high tension transmission lines. It has an installed capacity of 21,000 K.W.⁸ The power being generated is not only meeting the needs of Kathmandu Valley but also is flowing down south, right upto Birganj on the Indo-Nepal border. Enroute, it is providing power to three industrial estates at Balaju, Patan and Hithada of Nepal.

The Pokhara Hydel Project : The Pokhara Hydel Project, although modest in size has considerable importance for the development of the valley. The Indian Cooperation Mission has now completed the Hydel scheme which has electrified the Pokhara town and valley. This project has a capacity of 1,000 K.W. The hydel station at Pokhara was commissioned on November 1, 1967.⁹

The Devighat Hydel Project : The foundation stone of the Rs.40 crores Devighat project about 70 km. north west from Kathmandu was laid in February 1981. The 14.1 MW Devighat project will be the fifth Indian aided hydel project being implemented on a "turn-key basis" in Nepal. The project plans to utilize tail waters of 12-year-old Indian aided Trisuli Project, 65 km. north of Kathmandu.¹⁰

The power generation from the station is evacuated through a 40-km long double circuit transmission line to Chabal in the Kathmandu Valley. This was constructed by National Hydro-electric Power Corporation (NHPC) under India's technical and economic cooperation (at the cost of Rs.73 crores under grant assistance). It was formally inaugurated by King Birendra on March 9, 1984.¹¹

The Pancheswar Project : The Pancheswar Project on Mahakali river which marks the border of western Nepal with India, has

not been started as yet. In March, 1976, both the governments decided to set up a joint Committee of experts for the investigation of this project. India has offered to meet the entire cost of Rs.74 million for technical investigation of this project. India's stand is that since the Mahakali is a border river, the benefits of this project cannot go exclusively to Nepal as sought by it.

However, an agreement was signed in October, 1980 for the execution of this 2 million kw project at a suitable site with a power station on both sides of the border. Both sides agreed to accept a consultant from the World Bank.

The Rapti Project : The Rapti Project is about 250 km southwest of Kathmandu. Unlike India's earlier proposal for the Rapti Project at Jalkundi, Nepal prefers its own scheme of multipurpose river project near Balopong about 80 km upstream of Jalkundi. This 80 metres high dam is proposed to generate 36 MW of energy and irrigate 68 thousand hectares in the Deokhuni Valley, Kapitabasti and Banke districts. It is estimated to cost Rs.100 crores. The Canadian Development Agency has already started during survey of this project.¹²

The Karnali Project : Karnali is the third, but the most important river which had tremendous power potential. For long Nepal, which wanted to diversify her aid resources,

avoided giving the project to India and tried to involve other powers. She, however, failed to find an alternative support - the U.S., U.K., U.S.S.R., Japan and the World Bank - all were approached, and ultimately had come to terms with India. In April, 1972, K.N.Bista, the then Nepalese Prime Minister visited New Delhi and asked for support.¹³ India and Nepal have reached an understanding for investigation of the Karnali hydro-electric project which will generate between 4000 to 5000 MW of power and irrigate over three lakhs hectares of land in Nepal and India. A team of Indian experts led by the Energy Secretary, proceeded with investigations of the project. The funding of the project would be decided after the investigations were over. Official thinking in Nepal favours a sizeable scaling down of the proposed Karnali multipurpose project in far-western Nepal and opting for the more modest "loop power project". Nepali official newspaper wrote that 'the success of the Karnali project depends chiefly on India's formal commitment to buy the surplus power.'¹⁴

India will contribute Rs.50 lakhs to the construction of Chandra Canal Project being built under Indo-Nepal bilateral co-operation.¹⁵ The recent agreement between India and Nepal, signed on October 29, 1984 provides upgradation of the Chandra Canal located in eastern Nepal, the construction of a pumped canal and distribution of water

from the Western Kosi Canal. It estimated cost of N Rs.37.91 crores covering 34,000 hectares of land under irrigation.¹⁶

Table 5.2

Power and Irrigation Projects in Nepal under Mutual Benefit Projects.

Schemes	Power	Irrigated Area
Karnali	4,600 MW	3 lakh hect.
Rapti	36 MW	68 thousand hect.
Devighat	14.1 MW	
Trisuli	21 MW	
Gandak	15 MW	60 thousand Acre
Kosi	18 MW	
Pancheswar	2 Million KW	
Pokhra	1 MW	
Chandra Pump Canal		34 thousand Hect.
Chatra Canal		2.12 lakh Acre.

Source : Chaturvedi, S.K. : 'Impact of Indian Economic Aid and Assistance on the Development of Nepal', 1986, p.11.

Appendix to Chapter 5

Appendix B : India's Aid for the Development of
Infra-structure in Nepal.

(a) Transport and Communication Links.

Most of the Indian aid during the two decades of 1950s and 1960s has been rendered in the building of the infrastructure in Nepal.

The major step in this direction taken by India was its collaboration with the U.S.A. after 1955. The collaboration underlined the similarity of their approach towards Nepal. It is significant to observe that the idea of joint programme was conceived at a stage when Nepal much against the wishes of both India and the U.S.A., had started cultivating relations of intimacy with China. Since both the countries wanted to counteract the involvement of China in Nepal's political and economic sphere, they along with Nepal readily agreed in 1958 to launch a tripartite agreement of road construction. Under this programme the Regional Transport Organisation (RTO) was to construct eight roads, namely, Raxaul-Bhainse, Sonauli-Pokhara, Kathmandu-Trisuli, Nepalganj-Surkhet, Dhalan-Dhankuta, Kathmandu-Janakpur, Dhangahi-Dauda and Hetuda-Baitadi. The ostensible purpose

of the RTO was to facilitate the rapid survey and construction of key roads of 1173 km in Nepal. But it was dismantled in 1961 after completing only 320 km. of motorable roads.¹⁷

Tribhuban Rajpath

This 73-mile long first National Highway of Nepal linking Thankot (near Kathmandu) and Bhainse completed in December 1956 with Indian assistance of Rs.5.65 crores and was handed over to HMG in August, 1965. This road benefited the Nepalese government in different spheres. For example, revenue earnings, foreign currency earnings and foreign trade increased tremendously. Different industries like Birganj Sugar Factory, Hetauda Saw Mill, Janakpur Cigarette Factory etc. got the opportunity to establish. Besides, agriculture has been deeply affected by this road. About 89.6% of chemical fertilizers, 59.1% of improved seeds, 68.40% of improved tools and 83% of insecticides were used during the 3rd FYP in the Central Development Region which has close proximity with this road.

Sidhartha Rajmarg

This Rajmarg popularly known as Sonauli-Pokhra Highway was started in 1964. This starts at Indian border and ends at Pokhra. This 200 km highway was completed in 1971 at

an estimated cost of Rs.20 crores. This road also facilitated Nepal in different ways. For instance, this road has brought a reduction in the cost of transport in the region as a whole. It affected the traditional pattern of farming in Pokhara with redistribution of income and development of commerce in the hills. This road has made easy to attract the tourists in the natural valleys of Pokhara - thus affecting Nepalese tourists industry. The road also has generated increasing amounts of commercial freight at a much cheaper rate. On the other hand, the prices of ghee, a major export of Nepal, went up nearly 25% while the price of oranges went up nearly 400 to 500%.¹⁸

Mahendra Rajmarg

The significant and major venture undertaken by India in this field was the construction of 'East-West Highway' known as 'Mahendra Rajmarg'. It may be noted that at the initial stage, India hesitated to take up this ambitious project, with the result that China agreed to construct some 100 miles of the highway in the eastern sector. The very idea of the Chinese experts working so close to India's open border found India to revise its attitude. India vigorously tried and succeeded in impressing upon the King through its Ambassador, Sriman Narayan, for the construction of the

Highway. This was indeed an outstanding achievement on the Indian diplomacy. Subsequently, an agreement was concluded for the construction of the eastern portion of the highway by the Indian Co-operation Mission. According to the present arrangements, India has taken up the construction of both the eastern as well as the western sectors of the road, which cover 410 miles out of the entire stretch of 640 miles. The remaining portion is being constructed jointly by the Soviet Union, the United States and the United Kingdom. India is building this road at an estimated cost of Rs.100 crores. This highway has made the social mobility faster.¹⁹

Kathmandu-Trisuli Road

This road was constructed by India mainly to facilitate the building and completion of Trisuli Hydel Project. The nearest railway Stn. is 180 miles away at Raxaul from where materials like cement, steel and timber were brought into Trisuli project.

Other Roads

Besides the above mentioned major road projects, the government of India cooperated with HMG in the construction of smaller roads like Makrawa-Lumbini Road (8 km), Balaji Road(9km).

Tripureshwar-Thankot Road (9 km), Janakpur Town Road (4 km), Dakshinakali Road (19 km), Hanuman Nagar-Rajbiraj Road (13.5 km), Kosi-Gendak area roads, Kathmandu-Godavari roads (16 km.)²⁰

Thus, about 2,000 miles long roads have been constructed with India's assistance. In this way India has tried to connect Kathmandu with all important commercial centres and big cities of Nepal providing easy transportational facilities and social mobility to common man. This may be seen in the table below :

Table 5.3

Roads constructed in Nepal under Indian Assistance.

Roads	Length	Expenditure
Tribhuvan Rajpath	73 miles	795 lakhs
Tripureswar	6	1.6
Kakrahwa	5	7.5
South Kali	12	17.6
Trisuli	5	107.0
Sunauli-Pokhra	128	1457.0
Balaju	2	3.0
Fatehpur-Kenoli	8.5	120.0
Hanuman Nagar	20.5	22.2
Janakpur	2.5	4.5
Mahendra Rajpath	410.0	5000.0
Godawari with BTO		
Raxaul	45.0	
Nepalganj	70.0	
Dheran	90.0	
Janakpur	130.0	137.0
Batadi	150.0	
Kudon	75.0	
	<u>1912.5</u>	

Source : Chaturvedi, S.K. : 'Impact of Indian Economic Aid and Assistance on the Development of Nepal', 1986, pp.12-13.

Civil Aviation

Besides building the roads, India had also embarked upon the construction of air-fields in different parts of Nepal. The air-fields are essential mechanism in the rapid development of civil aviation in Nepal and are useful in stimulating the economic development in the absence of many all-weather roads connecting various parts of the country. Apart from the permanent all-weather Gauchar airport, equipped with modern facilities and technology, at the cost of about Rs.70 lakhs; India so far has completed work on the airports namely, Bheirawa, Biratnagar, Janakpur, Pokhara and Simra at a cost of Rs.1 crore.

Postal & Telecommunications

In 1951, the modern communications systems was virtually non-existent in Nepal. In 1956, Nepal became a member of the Universal Postal Union. India also assisted Nepal in the field of postal and telecommunication services. She provided assistance by sending experts, for modernisation of Nepalese postal services and also extended an aid of Rs.12 lakhs for the construction of Kathmandu's General Post Office, a Foreign Post office in 1968. New Delhi also assisted Nepal in the field of telecommunications service by installing

a direct teleprinter circuit between Kathmandu and New Delhi in 1970. In the same year, Kathmandu-Raxaul Telephone line was also commissioned. In 1968, a teleprinter link between Kathmandu and Calcutta was also set up.²¹

Some further aid in transport and communication

A list of recent Indian aided, agreed and completed projects on transport and communication in Nepal is given below.

(1) In 1968, to link Biratnagar of Nepal with Calcutta, an overhead trunk telephone has been laid through Jogbani and Forbeshganj.

(2) In 1971, construction of the single span steel bridge over the Kali Gandaki river at Ramdighat on the Sidhartha Rajmarg which is the largest bridge of this kind in Nepal.

(3) February 1972, inauguration of Kathmandu-Bombay direct radio, telephone, telegraph and telex circuit.

(4) 29 December 1974, inauguration of telephone exchange in Bhadrapur at a cost of Rs.0.6 million with a capacity of 250 connections.

(5) 14 February 1975, inauguration of telephone exchange in Janakpurcham, costing Rs.8 lakhs with a capacity of 200 lines.

(6) 22 February 1975, a 16 km. Kathmandu-Godavari road was inaugurated which incurred a cost of Rs.9.5 million.

(7) 25 February 1976, inauguration of a 293 metre long bridge on Rapti river at Bhaluway at a cost of Rs.96 million.

(8) 11 May 1976, opening up of a 46 km. metalled road from Ranipanwa to Trisuli.

(9) 12 January 1977, inauguration of a 1300 line automatic air conditioned telephone exchange installed in Biratnagar.

(10) 7 November 1977, inauguration of Kamla bridge (640 mt. long) on the Kamla river on the Mahendra Highway. It cost Rs.40 million.

(11) 16 September, 1978 in a Memorandum of understanding signed between Nepal and India both agreed to construct a railway line to Udaipur at the cost of Rs.20 crores.

(12) In 1981, the micro-wave system was completed upto Raxaul.

(13) In 1983, a co-axial cable link between Birganj

in Nepal and Raxaul in India was completed. This has opened 36 communication channels between India and Nepal.²²

(b) Education

India has directed its assistance in the field of education in order to effect general social change in Nepal. The first major step taken by India in the field of higher education was the setting up of the Tribhuvan University in 1960. To start with, the assistance was given by providing for post-graduate teaching in its various departments. The government of India had also extended its aid for the construction of various buildings of Science Block, research centre, library etc. India so far had spent Rs.50 lakhs on University's various schemes and has committed to spend another 53 lakhs.²³ On November, 1972, government of India handed over laboratory equipment worth Rs.70,000 to the Zoology, Botany and Chemistry Departments of the Tribhuvan University as a gift from the ICM. On 27 December, 1972, a hostel constructed for research scholars at the Tribhuvan University costing Rs. 6 lakhs was inaugurated.

India's cooperation in the development of education in Nepal has been unique. Perhaps more than 90% of Nepal's experts in different fields have been trained in India. The Schools and Colleges of India welcome Nepali students irrespective of their merit and qualifications.

India while deeply understanding the archaeological values of Nepal and in a bid to preserve these valuable items sent a number of archaeological experts from India. The services of an archaeological adviser were made available in 1959. India also set up a National Archives Building in Nepal.

India will provide Nepal Rs.3 crores for the construction of an international archaeological museum at Lumbini, the birth place of Lord Buddha.²⁴

Besides providing financial aid, India has cooperated with Nepal by providing training facilities to its nationals. The assistance was of tremendous significance in the process of making Nepal self-reliant. India started providing training facilities as far back as 1952 under the Colombo Plan and from that time, over 2,300 persons have been deputed from Nepal to India for training in the field of sciences, arts, agriculture and medicine; and of the over 1,500 have already returned to Nepal. India has also extended its assistance by sending experts on ad hoc basis to render advice and by arranging visits and study tour of the officials of Nepalese government to various projects in India. So far more than one thousand Indian experts had worked in Nepal, out of which about 800 were engaged in road, irrigation works and some other projects.

India's assistance in the field of social services, including medical and health service, has been significant. Aid has been extended to the 'Propkar Sri Panch Indra Rajaya Laxmi Devi Maternity Home' at Kathmandu not only by providing medical personnel, construction of additional building, but also meeting the running expenses and the cost of medicines. India has been cooperating with the Nepalese government in the implementation of various projects for the supply of drinking water in a number of places. 24 such projects have already been taken up, benefiting about 4 lakhs of people, the cost of water supply scheme taken up was Rs.1.3 crores and they include sizeable schemes for Kathmandu, Biratnagar, Pokhara, Birganj, Janakpur and Rajbiraj.²⁵

Technical Assistance

The transmission of knowledge usually called technical assistance is not merely a matter of technology in the narrow sense, but includes managerial and administrative skills and arrangements. The process of providing technical assistance involves a number of steps - agreeing on the project, finding competent personnel to carry it out and assuring through on the spot arrangements that an actual transfer takes places.

Again, the types of this assistance depends on the stage of development of the recipient country. There are

two main channels of passing along skills and knowledge, one channel sends advisers, trainers and demonstrators, the other brings students and trainees.²⁶

Technical assistance in different forms has been the hall-mark of Indo-Nepalese economic cooperation. India undertook this mainly because of Nepal's least developed character, very low income and high illiteracy rates which were caused by location, climate, lack of natural resources, social and political organisations and scattered population. Further, this was aimed at increasing the domestic stock of skills and productivity and to strengthen and supplement Nepal's capacity to produce new skills.

The implementation of Indian aid programme in Nepal is secured through deputation of Indian experts, provision of training facilities in India to the Nepalese nationals and supply of necessary equipment for completion of projects undertaken in Nepal. Training places provided to the Nepalese nationals in India form part of the larger regional multilateral aid programme of Colombo Plan, which is a very major source of aid to Nepal from this country. Upto 1976, Nepal was provided 3,334 training places at an expenditure of Rs.37,485 lakhs under this plan.²⁷

Between 1952-76, the number of Nepalese students

trained in India under Technical cooperation scheme of Colombo Plan reached 3668 in which 31.6% were engineering students, 14.4% were in the field of education, 13.4% in agriculture and 7.8% in the medicine. India set up three training institutions, viz. the Rural Institute of Patan, Engineering School in Kathmandu and Forest Research Institute at Hitausa.²⁸

Nepal and India signed on October 29, 1984 two agreements, involving Rs.37.98 crores, in the field of irrigation and industrial training. The agreement provides for technical assistance to 20 private entrepreneurs and officials of the Nepalese Deptt. of industry to acquire entrepreneurial skills through training in various institutions and industrial establishments in India. Training by Indian experts in Nepal is also envisaged.²⁹

Appendix to Chapter 5

Appendix C : Summary of Major Aid Agreements and Cooperation between India and Nepal since 1951.

- 1951 : Construction commenced of a temporary airstrip at Kathmandu.
- 1953 : Construction commenced on the 116-km. Tribhuvan Rajpath.
- 1954 : Completion of Gauchar Airport at Kathmandu - Establishment of Indian Aid (later Indian Co-operation) Mission at Kathmandu.
- 1956 : Completion of Tribhuvan Rajpath.
- 1951-56: Total Aid utilised at N Rs. 74 million.
- 1958 : Agreement signed on November 20, for Trisuli hydel project (capacity 21,000 kw).
- 1960 : Seven new agreements signed for development of horticulture, veterinary, Tribhuvan University, engineering school, industrial estates, national archives and forestry.
- 1951-60: Total Aid utilised at N Rs.165 million.
- 1962 : Agreement signed on April 25, for Kathmandu water supply project.
- 1964 : Aid negotiations for the construction of five airports, Sonali-Pokhara Road and Chattrra Canals.
- 1965 : Assistance promised for the construction of 624 kms. of the 990 km. long East-West Highway.

- 1966 : Completion of four roads, three airports, eleven irrigation schemes, first phase of Trisuli project, four horticultural centres, twenty-one veterinary units, five educational buildings, and one industrial unit.
- 1966 : Inauguration by the Prime Minister, Mrs. Indira Gandhi of Kathmandu Water Supply Project on October 6.
- : Further aid of Rs.400 million (IC) for 1966-71 was announced by the Indian Prime Minister.
- : Agreement signed on December 19 for the construction of the Eastern Sector of the East-West Highway.
- 1951-66: Total Aid utilised at N Rs.505 million.
- 1967 : Projects completed include :
- Central Vaccine Laboratory, Kathmandu; G.P.O. Building, Kathmandu; Chemistry Block, Tribhuvan University; Janakpur Airport; Forestry Institute, Hetauda; National Archives Buildings, Kathmandu; Bhaisava airport, and water supply scheme.
- 1968 : "Special Assistance Programme" taken up for 1968-70 with an outlay of N Rs.54 million.
- : Completion of Bagmati Bridge, Kathmandu; Biratnagar airport; and hangers at Kathmandu airport.

1969-70: Building completed :

Foreign Post Office; Central Veterinary Hospital;
 Certain premises in the Tribhuvan University;
 The Kathmandu-Dakshinkali Road; First phase of
 Chattra Canals; Trisuli Hydel Project;
 Sonauli-Pokhara Road.

1971 : Rajbiraj Hospital completed.

— : Agreement to exchange 5,000 kw. of power daily
 on border towns.

— : Agreement for the metalling of the Lanan-Khel-Godavari
 Road.

1972 : An amount of Rs.1.3 million handed over to the H.M.G.
 for the implementation of the development programme
 for inaccessible areas.

— : India to give Rs.7.2 millions to meet the cost
 of building telephone exchange at Biratnagar,
 Janakpur and Dhedrapur.

— : Agreement to set up industrial estates at Nepalganj
 and Dharan at a cost of Rs. 5.5 million.

— : Agreement for the construction of a desilting basin
 at Trisuli Project site at a cost of Rs. 7.4 million.

— : Agreement signed for the construction of the Western
 sector (242 km) of the East-West Highway at a cost of
 Rs. 351.8 millions as a grant from India.

- 1972 : Inauguration of a Research Student Hostel at Tribhuvan University.
- : India agreed :
- (i) to raise the allocation for the Eastern sector of the East-West Highway.
 - (ii) to extend the period of validity of the horticulture development agreement
 - (iii) to regularise the expenditure incurred between 1966-1970 on the technical services offered for geological survey in Nepal.
 - (iv) to hand over the surplus equipment and machinery for Trisuli Project.
- 1971-72 : Total Aid given by India at N Rs.1230 million.
- 1973 : Inauguration of Dhangarhi Hospital.
- : Inauguration of the International Telephone Exchange at Kathmandu.
- : Inauguration of the Eastern Canal of Gandak Project.
- : Inauguration of the Gandhi Bhavan at Tribhuvan University.
- : Completion of the survey of alignment of the Kathmandu-Dhenkuta Road (300 km)
- : Agreement to advance a loan of Rs.100 (IC) million.
- : Agreement to regularise the "additional aid" given in 1967.

- : Agreement to construct a bridge over Kamala river costing Rs.17.5 million.
- : Agreement between India Oil Corporation and Nepal Oil Corporation to channelise fuel oil imports through the latter.
- 1974 : Completion of the Eastern Sector of the East-West Highway.
- : Damak-Bodharkhola Road handed over to H.M.G.
- : Agreement for the expansion of a Maternity Home at Kathmandu.
- : Agreement to advance a loan amounting to Rs.50 million.
- : Letters exchanged for the metalling of Trisuli-Rani Panwa Road.
- 1976 : Construction of Dholaghat Mountain Road.
- : Agreed to cooperate in setting up joint industrial ventures in Nepal.
- 1977 : Construction of Chandra Pump Canals and Sports Complex at Pokhara.
- 1978 : Expansion of Patan Industrial Estate at Paropokar Maternity Hospital.
- : Area survey of the alignment of Dolaghat-Dhankuta road.

- 1979 : Construction of the 302 km long Central sector of Mahendra Raj Marg expected to be completed by 1980-81 at an estimated cost of Rs.44.36 crores.
- : Commencement of work on the 14.1 m.w. Devighat Hydro-Electric Project which was estimated to cost Rs. 30 crores.
- 1978-79: An amount of Rs.10,904 crores was provided for meeting expenditure on schemes on hand.
- 1980 : A Rs.13 lakh agreement on for the Coaxial cable link along with microwave systems upto the border territories between the two countries.
- 1981 : 1.3 crores Aid for welfare schemes in Pokhara Valley.³⁰

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Appendix to Chapter 8

Appendix A : A Note on Terms of Trade between Nepal and India.

The results of computation of gross barter terms of trade (T/T) of Nepal is an index of relationship of the total physical quantity of exports to total physical quantity of imports have been given in tables 8A.1, 8A.2 and 8A.3 of appendix. Symbolically, $\frac{Qx_1}{Qm_1} \div \frac{Qx_0}{Qm_0}$ where Q stands for quantity, X for exports, m for imports and 0 and 1 for the base and subsequent periods respectively. The quantities expressed in this formula as index numbers which are derived by dividing index number of value (price times quantity) by price index.

Taking 1956/57 as the base year, the gross barter terms of trade of Nepal (Table 8A.1) was unfavourable from 1957/58 to 1965/66 except for the year 1961/62. From 1966/67 to 1976/77 it turned to be favourable except for the year 1974/75. Again, from 1977/78 on, it has once again begun unfavourable to Nepal. Taking the entire 23 years period (1956/57 to 1978/79) into consideration, the gross barter terms of trade was favourable to Nepal. The fitted trend of the gross barter terms of trade of Nepal (computed through linear regression) have been studied. The results show that the gross barter terms of trade of Nepal over the period 1956/57 to 1970/71 (15 years) was favourable (Table 8A.5, Fig. 2), but during the period 1974/75 to 1978/79 (5 years) it was deteriorating (Table 8A.6, Fig. 3), although

the trend for the whole period of 23 years (1956/57 to 1978/79) it has improved marginally (Table 8A.4, Fig.1).

The pattern of gross barter terms of trade of Nepal with India is quite similar to that of total trade. Except for the period 1971/72 to 1973/74 for which no relevant data are available, its overall tendency is quite akin to that of Nepal's total trade (Table 8A.2). With respect to the fitted trend of the terms of trade of Nepal with India, it has been shown that for the period 1956/57 to 1970/71 (15 years) it was improving (Table 8A.8, Fig.4), but for the period 1974/75 to 1978/79 (5 years) it has declined (Table 8A.10, Fig.6).

As regards the gross barter terms of trade of Nepal with overseas countries, the overall tendency is quite different. Taking 1956/57 as the base year as before, it remained unfavourable throughout the fourteen years period (1957/58 to 1970/71) except for the year 1963/64. Relevant data for the period 1971/72 to 1973/74 are not available to compute. Over the period 1974/75 to 1978/79 (5 years) it was found that for the years 1974/75, 1975/76 and 1978/79, it was unfavourable whereas for the years 1976/77 and 1977/78 it was favourable (Table 8A.3). The fitted trend of the terms of trade of Nepal with overseas countries has been revealed quite opposite to that of India. It has been found that over the period 1956/57 to 1970/71 (15 years) it was declining (Table 8A.9, Fig.5), but it has improved (Table 8A.11,

Fig. 7) for the period 1974/75 to 1978/79 (5 years).

Regarding the average gross barter terms of trade of Nepal it is observed the same results. As shown in Table 8A.7, the average gross barter terms of trade of Nepal with India was vastly favourable as compared to overseas countries over the period 1956/57 to 1970/71. But it was quite opposite during the period 1974/75 to 1978/79.

Presumably, it means that when Nepal tried to diversify its imports and exports, the terms of trade of Nepal deteriorated relatively to the earlier period. This, also, signifies that Nepal is keen to diversify irrespective of her economic costs. Trade concentration with India gave Nepal a better terms of trade and diversification led to its worsening. Hence, the welfare ^{gain} costs of diversification, purely in economic terms, are not that large as is often presumed.

Table 8A.1

Gross Barter Terms of Trade of Nepal 1956/57 to 1978/79

Fiscal year	Price Index 1955/56 =100	Index Number of Export Values	Index Number of Export Quantity	Index Number of Import Value	Index Number of Import Quantity	Gross Barter Terms of Trade
1	2	3	4 (3 ÷ 2 × 100)	5	6 (5 ÷ 2 × 100)	7 (4 ÷ 6 × 100)
1956-57	101.80	100.00	98.23	100.00	98.23	100.00
1957-58	100.07	76.78	76.73	93.21	93.14	82.38
1958-59	100.97	123.53	122.34	131.49	130.23	93.94
1959-60	102.70	137.99	134.24	169.24	164.65	81.53
1960-61	108.14	219.68	203.14	234.26	216.63	93.77
1961-62	110.30	277.80	251.86	261.59	237.16	106.20
1962-63	117.34	301.29	256.77	355.54	303.00	84.74
1963-64	128.39	304.98	237.54	355.85	277.16	85.70
1964-65	146.42	461.46	315.16	481.99	329.18	95.74
1965-66	167.21	392.90	234.97	460.29	275.28	85.36
1966-67	170.22	446.54	262.33	283.28	166.42	157.63
1967-68	168.52	411.62	244.25	281.22	166.89	146.36
1968-69	175.43	599.29	341.61	440.21	250.93	136.14
1969-70	194.20	512.67	263.99	508.94	262.07	100.73
1970-71	203.72	419.65	205.99	411.49	201.99	101.98
1971-72	206.37	544.49	263.84	522.85	253.36	104.14
1972-73	229.69	661.44	287.97	579.05	252.10	114.23
1973-74	266.67	718.13	269.29	684.65	256.74	104.89
1974-75	304.27	931.82	306.25	1068.11	351.04	87.24
1975-76	302.08	1242.01	411.15	1166.46	386.14	106.48
1976-77	310.24	1220.00	393.24	1181.95	380.98	103.22
1977-78	344.86	1095.76	317.74	1454.21	421.68	75.35
1978-79	355.00	1358.33	332.63	1697.98	478.30	80.00

Table 8A.2
Gross Barter Terms of Trade with India
1956/57 to 1978/79

Fiscal Year	Price Index 1955-56 =100	Index Number of Export Value	Index Number of Export Quantity	Index Number of Import Value	Index Number of Import Quantity	Gross Barter Terms of Trade
1	2	3	4	5	6	7
1956-57	101.80	100.00	98.23	100.00	98.23	100.00
1957-58	100.07	75.43	75.38	90.66	90.60	83.20
1958-59	100.97	124.89	123.69	131.59	130.32	94.91
1959-60	102.79	140.52	136.70	162.77	158.35	86.33
1960-61	108.18	223.87	207.02	226.19	209.16	98.98
1961-62	110.30	282.43	256.06	265.12	240.36	106.55
1962-63	117.34	306.10	260.86	361.18	307.81	84.75
1963-64	128.39	304.97	237.53	359.15	279.73	84.91
1964-65	146.42	465.74	318.08	486.29	332.12	95.77
1965-66	167.21	396.53	237.14	460.41	275.35	86.12
1966-67	170.22	450.32	264.55	280.47	164.77	160.56
1967-68	168.52	417.76	247.90	266.01	157.85	157.05
1968-69	175.43	609.96	347.69	420.49	239.69	145.06
1969-70	194.20	519.47	267.49	477.16	245.70	108.87
1970-71	203.72	423.04	207.66	371.91	182.56	113.75
1971-72	206.37	NA	NA	NA	NA	NA
1972-73	229.69	NA	NA	NA	NA	NA
1973-74	266.67	NA	NA	NA	NA	NA
1974-75	304.27	799.31	262.70	889.87	292.46	89.82
1975-76	302.08	956.47	316.63	739.98	244.96	129.26
1976-77	310.24	834.35	268.94	810.18	261.15	102.98
1977-78	344.86	533.00	154.55	938.49	272.14	56.79
1978-79	355.00	695.80	196.00	953.80	268.68	72.94

Table SA.3

Gross Barter Terms of Trade with Overseas countries
1956/57 to 1978/79

Fiscal Year	Price Index 1955/56 = 100	Index Number of Export Value	Index Number of Export Quantity	Index Number of Import Value	Index Number of Import Quantity	Gross Barter Terms of Trade
1	2	3	4	5	6	7
1956-57	101.80	100.00	98.23	100.00	98.23	100.00
1957-58	100.07	138.70	138.60	197.46	197.32	70.24
1958-59	100.97	61.00	60.41	127.52	126.29	47.83
1959-60	102.79	21.81	21.22	433.63	421.86	5.03
1960-61	108.18	27.75	25.66	563.96	521.51	4.92
1961-62	110.30	65.22	59.13	117.10	106.16	55.70
1962-63	117.34	80.70	68.77	125.03	106.55	64.54
1963-64	128.39	305.25	237.75	220.99	171.12	138.13
1964-65	146.42	264.93	180.94	306.55	209.36	86.42
1965-66	167.21	226.13	135.24	455.36	272.33	49.66
1966-67	170.22	273.18	160.49	398.00	233.81	68.64
1967-68	168.52	129.91	77.09	902.83	535.74	14.38
1968-69	175.43	109.77	62.57	1246.12	710.32	8.81
1969-70	194.20	200.00	103.37	1807.34	930.66	11.11
1970-71	203.72	263.80	129.49	2028.26	995.61	13.01
1971-72	206.37	NA	NA	NA	NA	NA
1972-73	229.69	NA	NA	NA	NA	NA
1973-74	266.67	NA	NA	NA	NA	NA
1974-75	304.27	7012.12	2304.77	8350.16	2744.32	83.98
1975-76	302.08	14346.07	4749.10	18590.61	6154.20	77.17
1976-77	310.24	18918.42	6097.99	16370.68	5276.78	115.56
1977-78	344.86	26921.46	7806.49	22524.02	6531.35	119.52
1978-79	355.00	31752.72	8947.24	32101.99	9042.81	98.94

Table 8A.4Gross Barter Terms of Trade of Nepal over the period 1956/57-1978/79.

Year	T	OBSERVED Y (Gross Barter T/T)	FITTED Y
1956-57	1	100.00	99.16
1957-58	2	92.38	99.34
1958-59	3	93.94	99.53
1959-60	4	81.53	99.72
1960-61	5	93.77	99.90
1961-62	6	106.20	100.1
1962-63	7	84.74	100.3
1963-64	8	85.70	100.5
1964-65	9	95.74	100.6
1965-66	10	85.35	100.8
1966-67	11	157.63	101.0
1967-68	12	146.36	101.2
1968-69	13	136.14	101.4
1969-70	14	100.73	101.6
1970-71	15	101.98	101.8
1971-72	16	106.14	102.0
1972-73	17	114.23	102.1
1973-74	18	104.89	102.3
1974-75	19	87.24	102.5
1975-76	20	106.48	102.7
1976-77	21	103.22	102.9
1977-78	22	75.35	103.1
1978-79	23	80.00	103.3

NUMBER OF OBSERVATIONS = 23

NAME OF DEPENDENT VARIABLE = Y

NAME OF INDEPENDENT VARIABLE = T

LINEAR REGRESSION : $Y = a + bT$

COEFFICIENTS : $Y = 98.972 + 0.1862 T$

ST. ERROR = (9.2222) (0.6726)

T with DF 1, 21 = (10.732) (0.2768)

$R^2 = 0.003636$ $F = 0.076635$ $DW = 1.0375.$

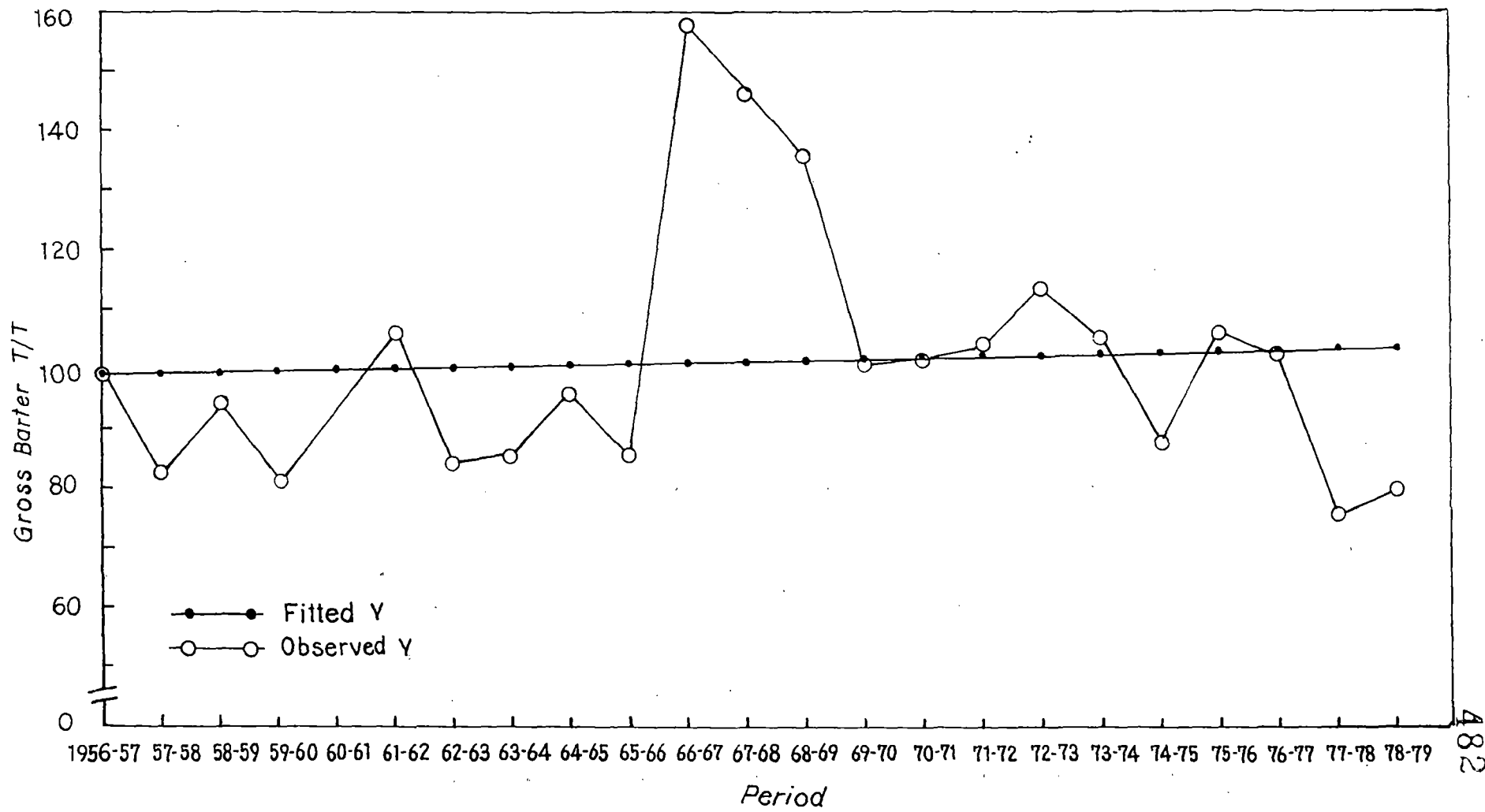


Fig. 1. Gross Barter Terms of Trade of Nepal over the period 1956-57 to 1978-79 .

Table BA.5Gross Barter Terms of Trade of Nepal for the period 1956/57-1970/71.

Year	T	OBSERVED Y(Gross Barter T/T)	FITTED Y
1956-57	1	100.00	84.60
1957-58	2	82.39	87.30
1958-59	3	93.94	89.99
1959-60	4	81.53	92.69
1960-61	5	93.77	95.39
1961-62	6	106.20	98.09
1962-63	7	84.74	100.8
1963-64	8	85.70	103.5
1964-65	9	95.74	106.2
1965-66	10	85.36	108.9
1966-67	11	157.63	111.6
1967-68	12	146.36	114.3
1968-69	13	136.14	117.0
1969-70	14	100.73	119.7
1970-71	15	101.98	122.4

NUMBER OF OBSERVATION = 15

NAME OF DEPENDENT VARIABLE = Y

NAME OF INDEPENDENT VARIABLE = T

LINEAR REGRESSION : $Y = a + bT$

COEFFICIENTS : $Y = 81.903 + 2.6971 T$

ST. ERROR = (11.671) (1.2837)

T with DF 1, 13 = (7.0176) (2.1011)

$R^2 = 0.2534947$

F = 4.4145

DW = 1.3960.

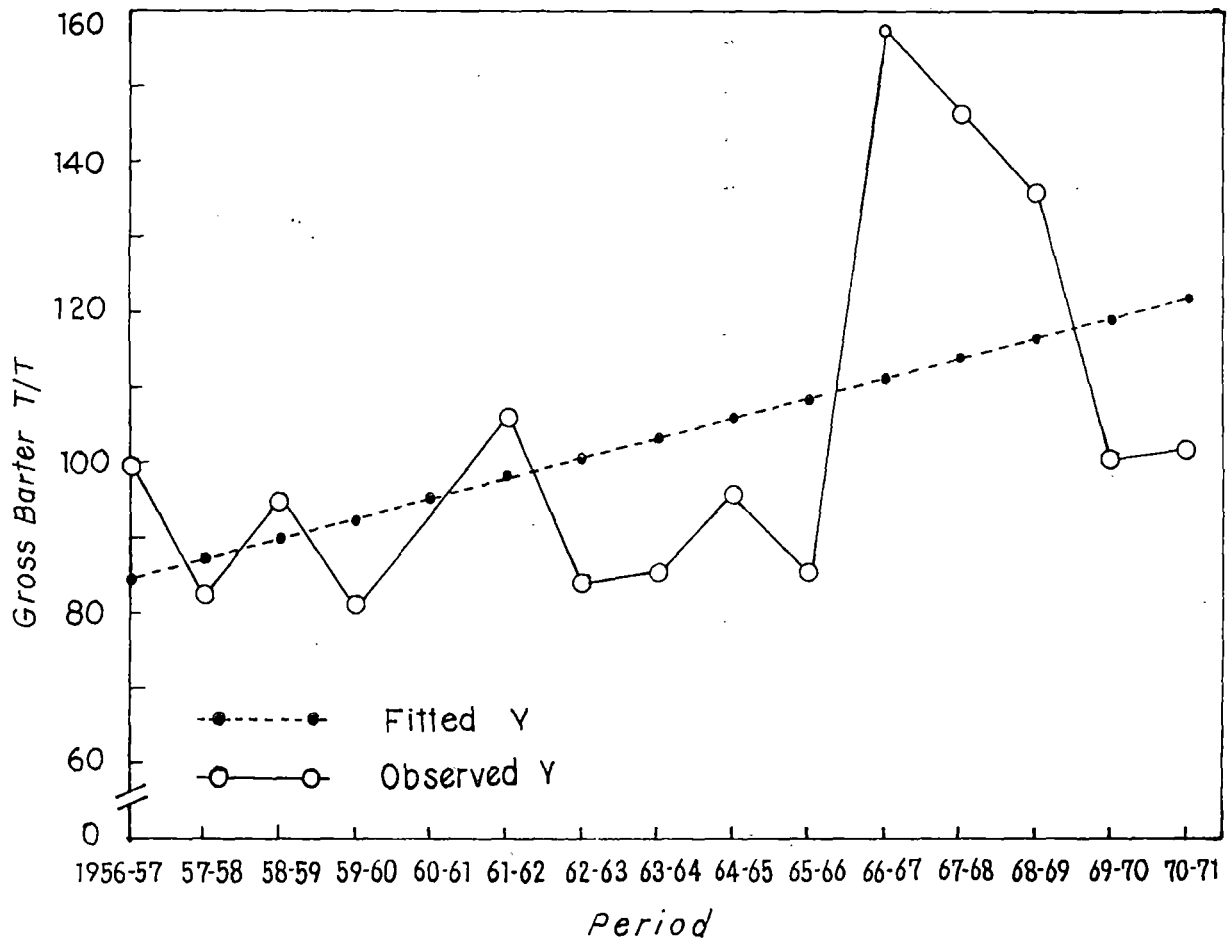


Fig. 2. Gross Barter Terms of Trade of Nepal for the period 1956-57 to 1970-71.

Table 8A.6Gross Barter Terms of Trade of Nepal for the period 1974/75-1978/79.

Year	T	OBSERVED Y (Gross Barter T/T)	FITTED Y
1974-75	1	87.24	99.58
1975-76	2	106.48	95.02
1976-77	3	103.22	90.46
1977-78	4	75.35	85.90
1978-79	5	80.00	81.34

NUMBER OF OBSERVATIONS = 5

NAME OF DEPENDENT VARIABLE = Y

NAME OF INDEPENDENT VARIABLE = T

LINEAR REGRESSION : $Y = a + bT$

COEFFICIENTS : $Y = 104.14 - 4.5610 T$

ST. ERROR = (14.323) (4.3187)

T with DF 1, 3 = (7.2707) (-1.0561)

$R^2 = 0.2710275$

F = 1.1154

DW = 2.1381.

Table 8A.7Average Gross Barter Terms of Trade of Nepal
1956/57 to 1978/79

<u>Periods</u>	<u>Index Value</u>
<u>I. For total Trade</u>	
1956/57 to 1978/79	101.21
1956/57 to 1970/71	103.48
1974/75 to 1978/79	90.46
<u>II. For India</u>	
1956/57 to 1970/71	107.12
1974/75 to 1978/79	90.36
<u>III. For Overseas countries</u>	
1956/57 to 1970/71	49.23
1974/75 to 1978/79	99.03

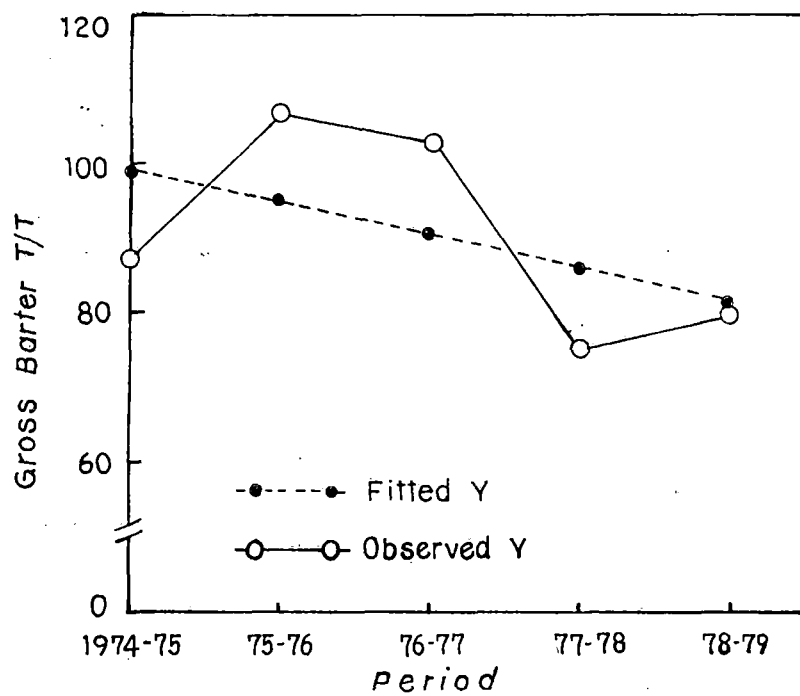


Fig. 3. Gross Barter Terms of Trade of Nepal for the period 1974-75 to 1978-79 .

Table 8A.8Gross Barter Terms of Trade of Nepal with India for the period1956/57-1970/71

Year	T	OBSERVED Y (Gross Barter T/T)	FITTED Y
1956-57	1	100.00	83.65
1957-58	2	83.20	87.00
1958-59	3	94.91	90.36
1959-60	4	86.33	93.71
1960-61	5	98.98	97.06
1961-62	6	106.55	100.4
1962-63	7	84.75	103.8
1963-64	8	84.91	107.1
1964-65	9	95.77	110.5
1965-66	10	86.12	113.8
1966-67	11	160.56	117.2
1967-68	12	157.05	120.5
1968-69	13	145.06	123.9
1969-70	14	108.87	127.2
1970-71	15	113.75	130.6

NUMBER OF OBSERVATIONS = 15

NAME OF DEPENDENT VARIABLE = Y

NAME OF INDEPENDENT VARIABLE = T

LINEAR REGRESSION : $Y = a + bT$ COEFFICIENTS : $Y = 80.298 + 3.3529 T$

ST. ERROR = (12.170) (1.3386)

T with DF 1, 13 = (6.5978) (2.5048)

 $R^2 = 0.3255222$

F = 6.2742

DW = 1.3022

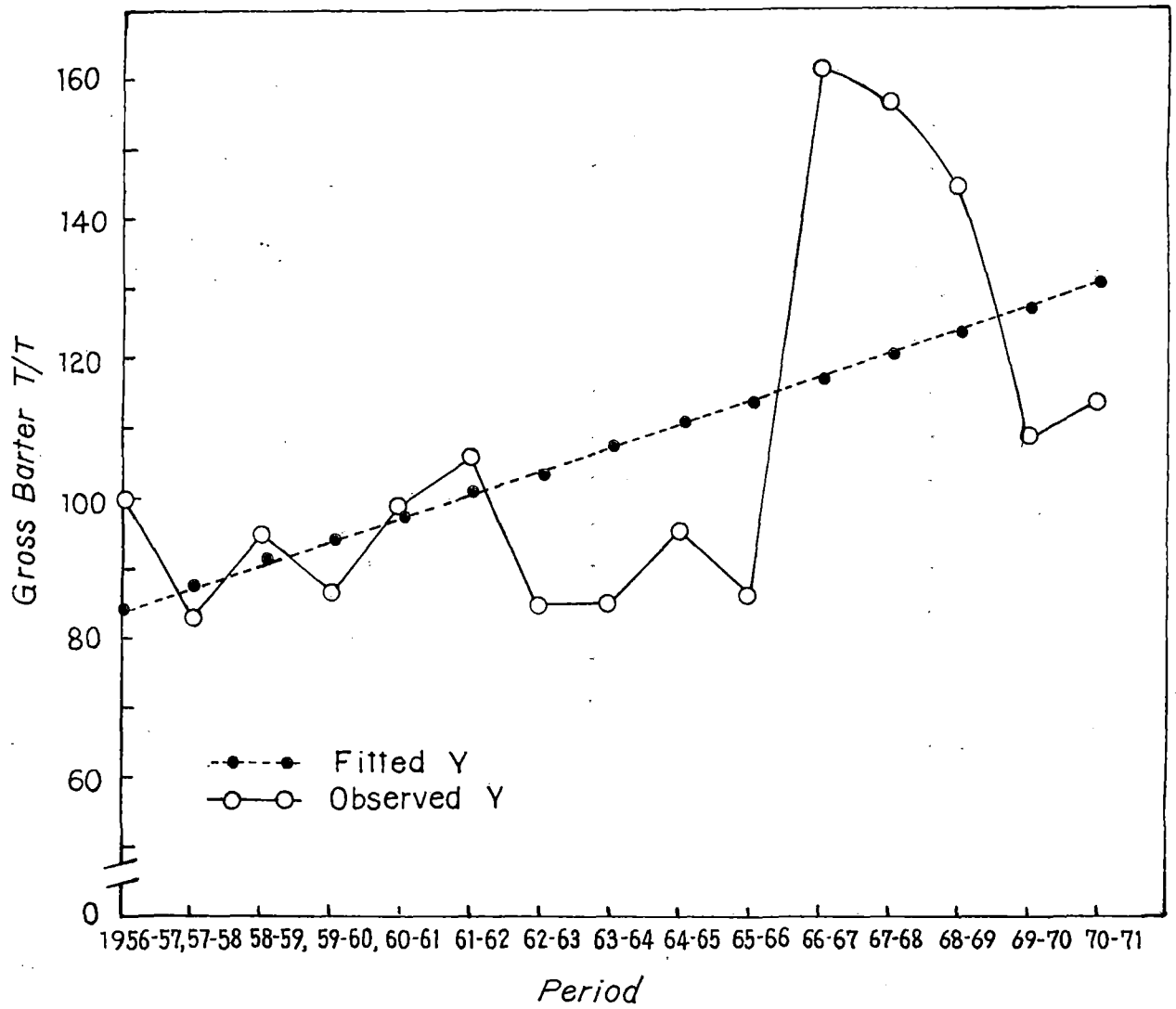


Fig. 4. Gross Barter Terms of Trade of Nepal with India for period 1956-57 to 1970-71.

Table 8A.9Gross Barter Terms of Trade of Nepal with Overseas Countries
for the period 1956/57-1970/71.

Year	T	OBSERVED Y(Gross Barter T/T)	FITTED Y
1956-57	1	100.00	72.24
1957-58	2	70.24	68.95
1958-59	3	47.83	65.66
1959-60	4	5.03	62.38
1960-61	5	4.92	59.09
1961-62	6	55.70	55.80
1962-63	7	64.54	52.52
1963-64	8	138.13	49.23
1964-65	9	86.42	45.94
1965-66	10	49.66	42.65
1966-67	11	68.64	39.37
1967-68	12	14.38	36.08
1968-69	13	8.81	32.79
1969-70	14	11.11	29.50
1970-71	15	13.01	26.22

NUMBER OF OBSERVATIONS = 15

NAME OF DEPENDENT VARIABLE= Y

NAME OF INDEPENDENT VARIABLE=T

LINEAR REGRESSION : $Y = a + bT$

COEFFICIENTS : $Y = 75.527 - 3.2873 T$

ST.ERROR = (21.025) (2.3125)

T with DF 1, 13 = (3.5922) (-1.4216)

$R^2 = 0.1345356$

F = 2.0208

DW = 0.93711

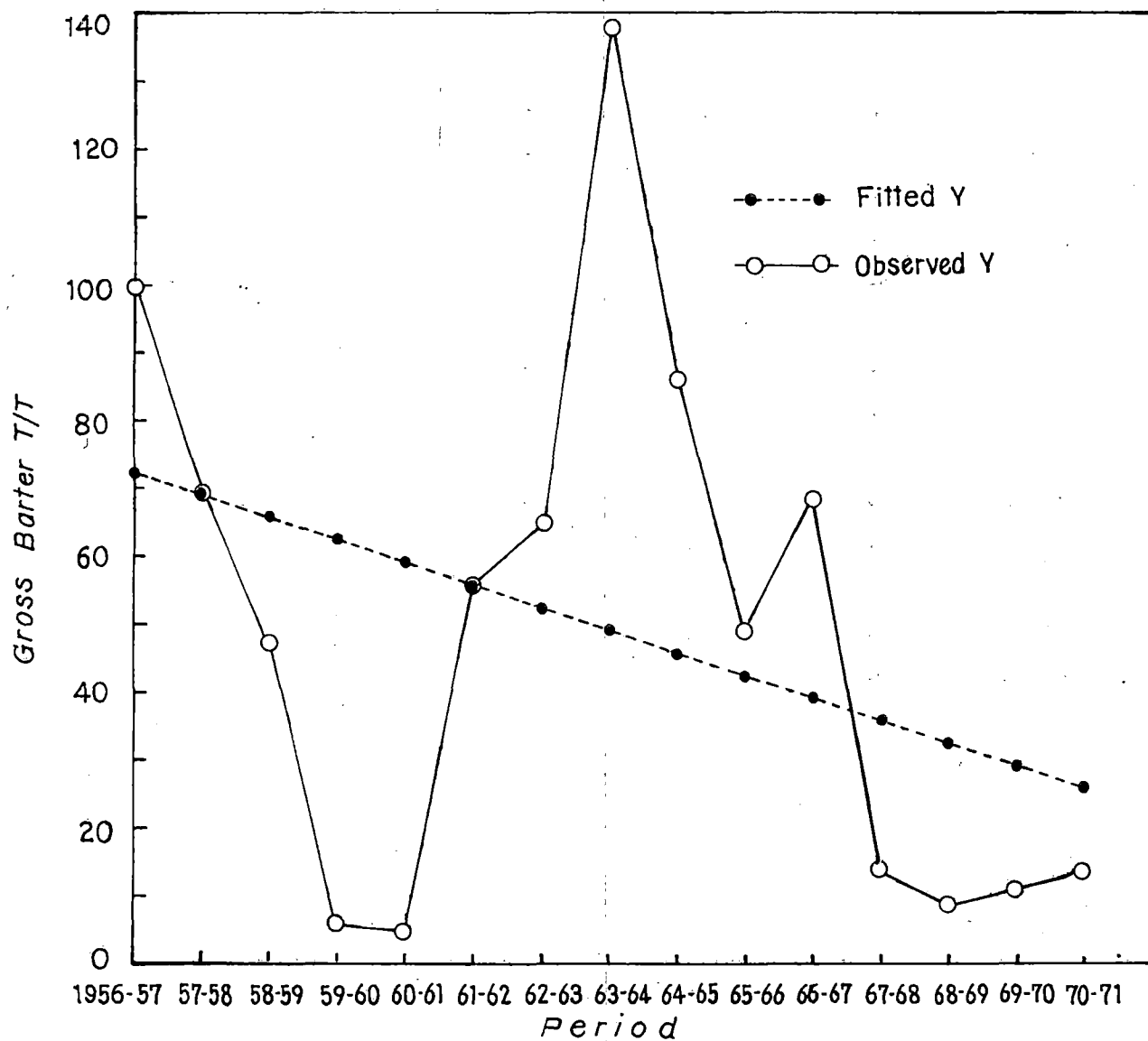


Fig. 5. Gross Barter Terms of Trade of Nepal with Overseas countries for the period 1956-57 to 1970-71.

Table 8A.10Gross Barter Terms of Trade of Nepal with India for the period
1974/75-1978/79.

Year	T	OBSERVED Y (Gross Barter T/T)	Fitted Y
1974-75	1	89.82	111.6
1975-76	2	129.26	101.0
1976-77	3	102.98	90.36
1977-78	4	56.79	79.73
1978-79	5	72.94	69.11

NUMBER OF OBSERVATIONS = 5

NAME OF DEPENDENT VARIABLE = Y

NAME OF INDEPENDENT VARIABLE = T

LINEAR REGRESSION : $Y = a + bT$

COEFFICIENTS : $Y = 122.23 - 10.623 T$

ST. ERROR = (26.908) (8.1131)

T with DF 1, 3 = (4.5424) (-1.3094)

$R^2 = 0.3636547$

F = 1.7144

DW = 2.3970

Table 8A.11Gross Barter Terms of Trade of Nepal with Overseas Countries
for the period 1974/75-1978/79.

Year	T	OBSERVED Y (Gross Barter T/T)	Fitted Y
1974-75	1	83.98	84.59
1975-76	2	77.17	91.81
1976-77	3	115.56	99.03
1977-78	4	119.52	106.3
1978-79	5	96.94	113.5

NUMBER OF OBSERVATIONS = 5

NAME OF DEPENDENT VARIABLE = Y

NAME OF INDEPENDENT VARIABLE = T

LINEAR REGRESSION : $Y = a + bT$

COEFFICIENTS : $Y = 77.353 + 7.2270 T$

ST. ERROR = (17.913) (5.4011)

T with DF 1, 3 = (4.3182) (1.3381)

$R^2 = 0.3737485$

F = 1.7904

DW = 2.2305.

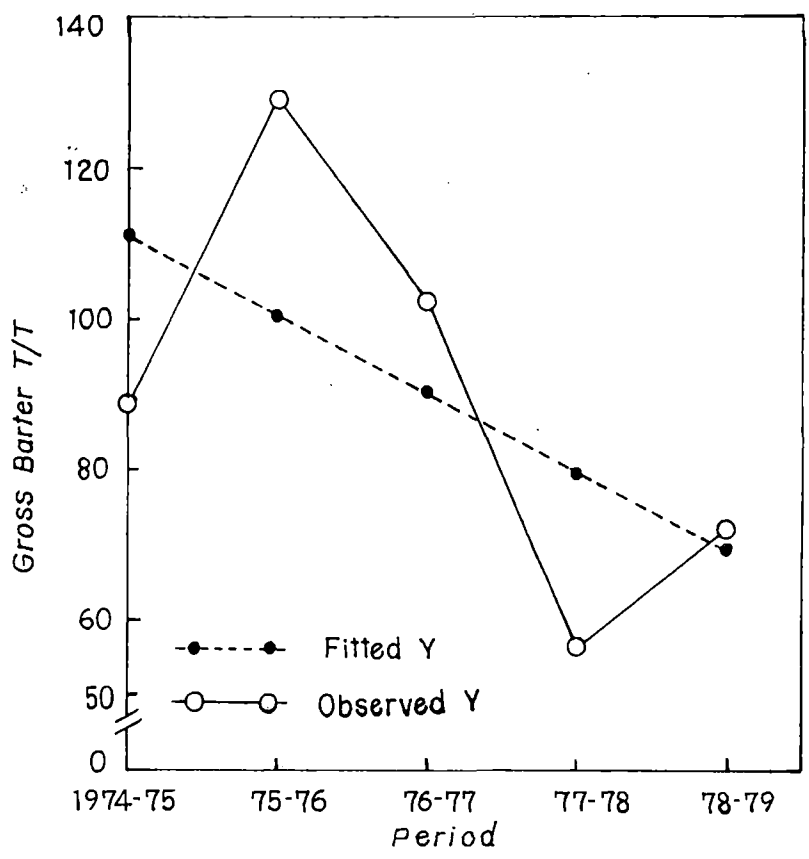


Fig. 6. Gross Barter Terms of Trade of Nepal with India for the period 1974-75 to 1978-79 .

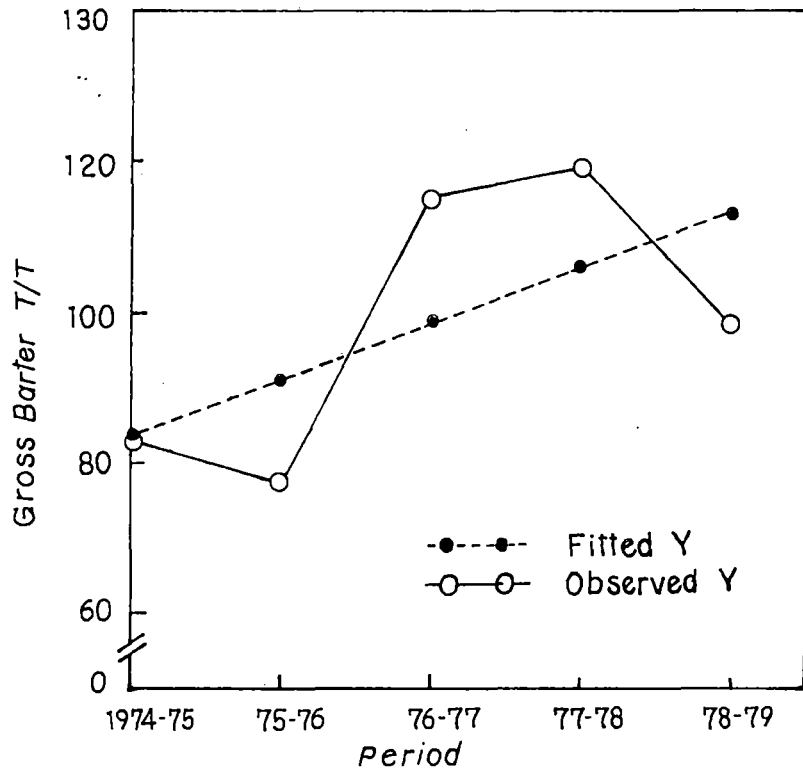


Fig. 7. Gross Barter Terms of Trade of Nepal with Overseas countries for the period 1974-75 to 1978-79

Appendix to Chapter 8Appendix B : A Note on the Foreign Trade Multiplier.

The concept of foreign trade multiplier implies that a change in export (dx) will lead to K times dx change in income (dy) and thereby in employment. In other words, it expresses "the change in income caused by a change in exports, or in investment in an open economy in which income spills over into imports."¹ Provided investment remains unchanged and foreign repercussion is absent, the value of the multiplier (K) equals $1/(MPM-MPS)$ where MPM and MPS stands for marginal propensity to import and marginal propensity to save respectively. Here it may also be noted that marginal propensity to save is the change in saving associated with given change in income (ds/dy). Similarly, absence of foreign repercussion means that "effect of change in exports and or imports on national income abroad and the backward effect which this has on foreign trade and national income at home (can be safely) neglected".²

For a small country like Nepal whose volume of trade with outside world is negligible, the assumption of the absence of foreign repercussion is quite valid. Besides, for a country like Nepal gross national product will be approximately equal to gross domestic product because of negligible net factor income from abroad.

Relevant time series data are not available to compute the value of the foreign trade multiplier for Nepal over a long period of time. However, available data for 1974/75 and 1978/79 indicate that its value is 1.25 (Table 3A.12 below). This means that if exports increased by Rs.100, income increases only by Rs.1.25.³

Table 8A.12
Value of Foreign Trade Multiplier
1974/75 to 1978/79.
(In Million Rs.)

Parameters	1974/75	1978/79	Increase in 1978/79 over 1974/75
1	2	3	4
1. Gross Domestic Product at constant prices of 1974/75	16571	18779	2208
2. Aggregate National saving as a % of GDP	4.8	8.0	3.2
3. Aggregate National Saving in absolute amount.	795.41	1502.32	706.91
4. Marginal Propensity to save (Col.4 of line 3 \div Col.4 of line 1)	-	-	0.32
5. Imports	1815	2885	1070
6. GDP deflator	100.00	113.76	13.76
7. Deflated Imports (Line 5 \div Line 6 X 100)	1815	2536	7776.17
8. Marginal Propensity to Import (Col.4 of line 5 \div Col. 4 of line 1)	-	-	0.48
9. Percentage change in Imports	-	-	158.95
10. Percentage change in Income or GDP	-	-	113.32
11. Income elasticity of Import (Line 9 \div Line 10)	-	-	1.4026
12. Value of foreign trade Multiplier $1/(0.48 + 0.32)$ $= 1/ 0.8$			1.25

References

1. Kindleberger, Chanls, P. - International economics, p.198.
2. Ibid., p.191.
3. Reejal, Pushkar, R. : (Nepal's Foreign Trade and Economic Development : 1956/57 to 1979/80', paper in CEDA, Kathmandu, 1982, p.43.

Appendix to Chap. 6Appendix C : A note on Indo-Nepalese Smuggling Traffic.

Nepal has about 810-825 kms. long open border with India which is manned by only 21 checkpoints. Smuggling of goods into either country is quite common. It has also facilitated by free exchange of citizens of two countries. The dual citizenship of most smugglers also poses a serious problem for the administration. They have their nominal shops or 'gaddis' on both sides of the border. On the Indian side, they are Indians and across the border they become Nepali citizens. In some cases the father is an Indian while the son is a Nepali citizen. The smugglers do not use the official transit points and obviously operate their trade through the local inhabitants of the border region as safe passage.

Border areas like Darjeeling, Dhulabari, Darbhanga, Bhagalpur, Gorakhpur, Rexaul, etc. are seen flooded with smuggled items. In Darjeeling, for example, because of its proximity with 'Peshupati' in Nepalese border the smuggled items are freely bought and sold. Policemen, vigilance and customs while claiming to have reduced the magnitude of smuggling, do not lay much stress on the ransacking of real sub-economy created by this trade. In Siliguri (Darjeeling district), because of adjacent Dhulabari (Nepal border), a famous 'Hongkong market' has been firmly established. It is like any other expensive markets in India. The only difference being that this market is flooded with smuggled items. One would certainly be surprised by 'how openly they do this business' scene in that area where it seems to have no department like police, vigilance and customs. Even if the raid is operated, the market never loses its foreign appearance. This type of complex invariably becomes the safe shelter of anti-social elements also.

On the import side, the goods smuggled are mainly electronic items which attract heavy import duty. In the presence

of limited purchasing power in Nepal, the neighbouring Indian markets easily become accessible to such cheap products. This gradually flourishes into a lucrative business. Other goods include synthetic textiles, zip fasteners and narcotic drugs like 'ganja', opium and 'chares' for which there is no restriction on its cultivation and sale in Nepal. Some foreign luxury goods such as stainless steel utensils, nylon yarn, watches, etc. whose entry has been banned in India, are seen flooding her markets. Cases of smuggling of Nepali silver coins and gold have also come to light. The Russian and Czechoslovak sugar and fertilizers are smuggled into India via Jhainagar, Jogbani, Baxaul and Galgalia.

The Indian products that smuggled into Nepal are snake skins whose exports are banned in India and hides and skins, jute goods, stainless steel sheets, petroleum, mica bristles, tyres etc.

The third country materials are pumped into India through Nepal against her trade and economic policies. Similarly, some Indian produce are attracted into Nepal by means of artificial incentives and then re-exported to third countries. This 'commodity shunting' helps the deflection of trade, causing astray to the actual imports and exports. Smuggling across the Indo-Nepalese border, amounting about Rs.40 crores annually, has caused anxiety and also irritants to the Indian government because this type of mechanism has drained away a considerable amount of foreign exchange from India.

Dumping or smuggling into India of third country goods received : (a) in the form of aid, or (b) in gift parcels, or (c) acquired by means of foreign exchange earned through incentive bonus, or (d) otherwise.

The Chinese policy of financing their projects in Nepal by the sale proceeds of their goods in Nepal have essentially made

the Chinese goods cheaper and attractive. These goods are outmarketing the Indian products and entering into India in large-scale. Since smuggling is a two-way traffic, Indian goods, particularly jute, textiles, mica and rice are smuggled out to Nepal for their final export to third countries, most probably China who in exchange supplies her cheap luxury items for its final export to wide markets of India. The unscrupulous traders in Nepal exploit this illegal barter operations in their own discreet ways. The smuggler-cum-producers import raw materials with the foreign exchange they earn. This is converted into manufactured goods and in the absence of local Nepali demand is let loose in India at cheap prices. The Indian currency received in such exchanges again goes to finance the smuggling of Indian goods to China and other countries.

Thus, the chief factor responsible for smuggling is cheap goods received by Nepal. Due to the grave paucity of internal development funds, it becomes imperative for her to depend on other nations for help. Many countries including Russia and China have complied the provision-aid in the form of cheap goods. The National Trading Company in Nepal has also sold so far only luxury and semi-luxury goods received from grant or on deferred payment basis from Soviet Union and China. Nepal is also importing considerable amount of luxury goods from foreign countries against her foreign exchange earnings.

Another significant factor is the speculative economic conditions between the two markets. Till Indian devaluation, there was not any significant price difference on either side of the border and customs duties were fairly low. Due to Indian currency devaluation the cost of imported goods in India immediately rose further and smuggling became more attractive. Thus, overnight the Nepali equivalent of Rs.100 IC fell from Rs.160 to Rs.101.55

making Indian goods more attractive in Nepal. India's devaluation was accompanied by the imposition of heavy export duties on 12 traditionally important export items including jute manufactures, tea, tobacco, hides and skins and mica. While they attracted heavy export duties when shipped directly from India, they could find their way to foreign markets duty free if they went first to Nepal. Some Nepal residing Indians and the natives of the same were quick to cooperate.

The loophole in the Indo-Nepalese Treaty of 1960 also facilitated smuggling. Prior to this India managed the foreign exchange account of Nepal and both the countries followed similar customs and tariff rules and, therefore, the chances of smuggling were remote. According to the Treaty and memorandum of understanding (Annexure II), India agreed to allow without any quantitative restrictions duty free import of Nepalese manufactured goods, utilising indigenous raw materials. It was especially agreed that a separate stimulation would be required for raw materials of the third ~~country~~ country origin. Despite these, India allowed from Nepal the unrestricted and duty free imports of the third country goods.

Apart from the economic factors, the administrative inefficiency and weakness and political factors played an important role by letting the smugglers go scotfree. Under the political factors, the international tensions and basic differences in the ideologies are the foremost. Actually the developed countries should have supplied the capital goods instead of luxuries if they really wished to see Nepal industrially advanced. It is difficult to assess whether they are selling cheap with a political objective or to demoralise the non-communist countries where they want to propagate of their ideology or purely on economic grounds to unload surplus production or to capture new markets for some

non-traditional items. However, this 'economic penetration' into Nepal has exerted political impact on adjoining Indian territories. It is why India views it with grave concern.

The socio-economic effects of smuggling are not so simple to explain. Adversely, both India and Nepal are affected in their control, planning and price policies in many ways. A strange situation is often created in which goods directly exported from India have to compete Indian goods re-exported by Nepal to third countries. Besides, Indian industries have to face keen competition from cheap foreign products which have crept into her markets somehow or other. The Indian citizen can now flatter himself by using numerous fashionable goods manufactured in other countries. Making a reference to its ruining effect Mr. Madhu Limaye has alleged that the unchecked smuggling has brought so much competition to Indian Mills that consequently 200 units manufacturing art silk fabrics had closed down and about 3000 workers had been laid off. According to his estimation, the manipulators made a profit of Rs.95 lakhs in a year out of an investment of Rs.4.50 lakhs only. This enormous profit led to the establishment of numerous factories on the Indo-Nepal borders just to evade Indian customs and economic discipline. The government of India is losing revenue. The loss of income tax, excise duty and customs to the Indian government was estimated by Mr. Limaye at Rs.8 lakhs a day which works out to be Rs.29 crores for a year.

It has brought a demoralising effect on the government and the people alike and has led to widespread corruption, black marketing and other social evils. The huge profits earned allow the offer of large bribe and the temptations to accept the same is difficult to resist. The lure of profits takes them to any event even below their social status. The under-invoicing and

over-invoicing techniques have invited illicit foreign exchange in Nepal. It has also made difficult to collect data on balance of payments between the two countries. Consequently, their fiscal policies have become ineffective and black money runs into circulation speedily. All this is happening at the cost of long-term industrial development of both India and Nepal. It has also posed a serious law and order problem.

Attempts have been made through talks between India and Nepal on the question of checking unauthorised trade. The Kathmandu talks held on 29 July, 1980, for example, broke off abruptly because of Nepal's stringent decision on the issue of 'import licenses for quantities much beyond its requirements'. They maintained that 'even if we only buy 10 per cent of our requirements, some of it will be smuggled into India because of the demand and supply position in your country (India)'. This ruling was not accepted by the Indian government. Nepal government's view that Nepal has less to lose and much to gain from this lucrative activities, but they have forgotten that this is happening at the cost of long-term industrial development.

However, the two countries have agreed upon a number of measures to check smuggling. Both countries have set up 'contact points' and increasing and strengthening surveillance across the common border. In an another meeting also on May, 1982 India and Nepal have agreed on a mechanism to keep in touch with each other to exchange information in an effort to curb smuggling across the common border. Contact points have been designated in two countries - an officer on special duty at the Directorate of Revenue Intelligence at New Delhi and the Directorate-General of Customs at Kathmandu was deputed for mutual cooperation in the matter of investigation. It was also agreed that the Nepal customs chief and the Collector of customs, Patna shall meet at intervals of six months.

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Appendix to Chapter 9Table 9.6Present Rate of Exchange of Nepalese Currency, 1986.

Currency	Unit	Buying Rates	Selling Rates
U.S. dollar	1	20.90	21.10
Pound Sterling	1	32.19	32.54
Australian dollar	1	15.41	15.56
Canadian dollar	1	15.05	15.21
Swiss Franc	1	11.44	11.57
Deutsche Mark	1	9.53	9.63
Netherland Guilder	1	8.46	8.55
Singapore dollar	1	9.43	9.53
French Franc	1	2.99	3.03
Indian rupee	100	170.00	170.15
Japanese yen	1,000	126.57	127.92
Asian monetary unit	1	24.89	24.94

Buying Rates only

Swedish Kroner	1	Rs. 2.94
Italian Lira	1,000	13.82
Australian schilling	100	134.71
Belgian Franc	100	46.43

Source : The Rising Nepal, May 9, 1986.

Exchange Rate with India

Rs.100 = N Rs.

1951	-	128.00
1953	-	150.00
1960	-	160.00
1966	-	101.55
1967	-	135.00
1980	-	145.00
1985	-	170.00

Table 9.7Money Supply of Nepal

(in Million Rs.)

July 1954 (1954-55)	83.0	July 1970 (1970-71)	568.7
1955 (1955-56)	93.0	1971	786.1
1956	99.2	1972	848.4
1957	83.9	1973	1003.9
1958	90.2	1974	1273.7
1959	96.2	1975	1332.5
1960	120.2	1976	1447.3
1961	152.1	1977	1852.0
1962	165.1	1978	2059.7
1963	178.2	1979	2504.9
1964	258.1	1980	2830.4
1965	315.6	1981	3207.8
1966	367.1	1982	3611.5
1967	390.9	1983	4348.9
1968	449.3	1984	622.6
1969	509.4	1985	5554.1