

## **Perspective on Nepal's Agriculture and Industry in the Fifth Plan**

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### Introduction

Planning has been accepted as an essential process for economic and social transformation in Nepal. It has been looked upon as a desirable instrument for directing the rate and pattern of development through the management of production, consumption, distribution, and other structural aspects of the economy.<sup>1</sup>

Nepal has accumulated more than two decades of experience in planning. It has already implemented four long term development plans. The current fifth five year plan (1975-80) is already more than half way through in terms of implementation. This paper looks at the place of agriculture and industrial sectors in Nepal's Fifth Plan. These sectors, however, will be discussed in the perspective of the basic objectives and policies prescribed by the plan. These two sectors cover more than 250 pages in the plan document. This paper, however, will zero in on major and significant aspects. For specific details, readers are requested to refer the Plan document itself.<sup>2</sup>

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1. See Govind R. Agrawal, Management and Development, (Kathmandu CEDA, 1977) p. 7.

2. See The Fifth Plan (Kathmandu: National Planning Commission, 1975) pp. 1-601 (In Nepali).

## Objectives of the Fifth Plan

The objectives, policies, programmes, and projects incorporated in the Fifth Plan are derived from:

1. The guiding principles of Nepal's Constitution that aim at establishing a democratic, just, dynamic and egalitarian society free from exploitation.<sup>3</sup>
2. The directive from His Majesty the King to make development people-oriented on the basis of regional balance.<sup>4</sup>

The plan is an indicative document of development programmes and projects to be undertaken during 1975-80. It is basically a product of the deliberations of the development seminars held at the regional level and active participation of government agencies at the Centre.<sup>5</sup> The main objectives of the Fifth Plan are:

1. Mass-oriented production: Production is conceived in terms of fulfilling the needs for commodities that are essential to the majority of the people;
2. Labour-intensive approach: Greatest importance has been given to the fuller utilization of human resources for acceleration people-oriented development;
3. Regional integration and Balance: Reduction in regional disparities by launching programmes according to the local environmental factors in order to encourage inter-regional economic exchange and interdependence.<sup>6</sup>

In order to accomplish the above objectives, the policy measures stated in the Fifth Plan are:<sup>7</sup>

### 1. Mobilization of Domestic Resources

- a) Increased investment in the public private and panchayat sectors,
- b) Dependence on foreign aid, will be progressively reduced by mobilization of increased domestic resources, especially from agriculture, public sector enterprises, new sources, improved collection administration of existing taxes, and savings from common people,
- c) curbing of unnecessary and wasteful expenditure.

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3. See The Constitution of Nepal (Kathmandu: Ministry of Law and Justice, Revised edition)
  4. See Nepal: The Fifth Plan in Brief (Kathmandu: National Planning Commission, 1975) p. 1.
  5. Ibid.
  6. See The Fifth Plan (Op. Cit) pp. 21-24.
  7. Ibid., pp. 24-27.

## 2. Investment and Production Pattern

- a) Public sector investment with the aim of rectification of regional imbalance,
- b) Significant increase in government grant to panchayat,
- c) Mobilization of local resources to match the increase in government grants,
- d) Investment and production with focus on projects that will associate maximum number of people in the production process and cater to the basic needs of the common man.

## 3. Labour Intensive Technique

- a) Maximum utilization of labour force, unless technical reasons necessitate otherwise, in determining project priority,
- b) Compulsory employment of native labour in projects,
- c) Labour intensive methods in agriculture.

## 4. Economic Stability

- a) Fiscal, monetary and price policies to stabilize the price level of development and consumer goods,
- b) Institutionalization of the procurement and distribution of essential commodities under the public sector.

## 5. Industrial Promotion

- a) Significant role of public sector in increasing industrial production,
- b) Establishment of new industries in the public sector, with encouragement of new industries in the public sector, with encouragement to joint ventures,
- c) Development of private sector as complementary to that of the public sector,

## 6. Trade Promotion and Diversification

- a) Institutionalization of foreign trade,
- b) Countrywise as well as commoditywise diversification.

## 7. Land System

- a) Establishing peasant proprietorship progressively on land,
- b) Institutionalization of marketing, credit and other facilities.

## 8. Panchayat Sector

- a) Conduct of local level development programmes through panchayats,
- b) Central level grants and technical support to panchayats.

In order to implement the above policies, the Fifth Plan prescribes financial outlay as well as physical targets in terms of maximum and minimum programmes. Based on 1974/75 prices, the minimum programme outlay is estimated at Rs. 9197 million and maximum programme outlay at Rs. 11404 million (See Table 1 for allocation of plan outlay). The Gross Domestic Product is expected to increase from 4 to 5 percent per annum. Agriculture sector has received the top most priority in allocation of plan outlay.

Table 1  
Allocation of Fifth Plan Outlay  
(Million Rupees)

Sector	Minimum*		Maximum	
	Rs.	%	Rs.	%
1. Agriculture <sup>1</sup>	3167	34.4	3571	34.8
2. Industry & Commerce <sup>2</sup>	1800	19.6	2040	17.9
3. Transport & Communication	2527	27.5	3385	29.7
4. Social Services <sup>3</sup>	1703	18.5	2008	17.6
	9197	100.0	11404	100.0

\* Composit figures for government, panchayat and private sector.

1. Includes land reform, irrigation, forest, soil conservation.

2. Includes Electricity and Mining.

3. Includes Education, Health, Drinking Water, Panchayat and other social services.

Source: The Fifth Plan (Kathmandu: National Planning Commission, 1975) p. 61.

#### Agriculture Sector in the Fifth Plan

Planning for agriculture sector in Nepal is based on the directive given by His Majesty the King which states that:

1. Livestock development be emphasized in the northerner region.
2. Horticulture in the hill region.
3. Foodgrain and other crops in the terai region.

Agriculture is the most important sector in Nepal's development strategy because 94 percent of her labour force are engaged in it, two thirds of national income is derived from it, and more than three-fourth of foreign trade is based on it. In the Fifth Plan, agriculture has been given the role of leading sector. The following objectives have been stated for agricultural development.<sup>8</sup>

8. Ibid, pp. 103-105.

1. Quantitative increases and qualitative improvements in agricultural production.
2. Development of specialization in agriculture production on regional basis with the consideration to geography and climate.
3. Production of raw materials for agro-oriented industries.
4. Quantitative increase, qualitative improvements and diversification in agro-based foreign trade.
5. Promotion of labour intensive techniques to generate employment and productivity increases.

In order to achieve the above objectives, the following policy measures have been stated for the agriculture sector:

1. Coordinated programmes in agriculture, irrigation and forest for effective utilization and conservation of land.
2. Coordinated mobilization of resources and manpower to make agriculture research and extension complementary to each other in increasing production.
3. Effective organizational arrangements to provide inputs to farmers for increasing production.
4. Priority to labour-oriented techniques to provide employment.
5. Institutional reforms to encourage farmers to produce more.
6. Intensive development of foodgrains and cash crops in terai, horticulture in hills and livestock in northern region.
7. Priority to adaptive research and complementarily in research and extension programmes.

#### Agriculture Programmes

The allocation of Fifth Plan outlay among the various subsectors of agriculture sector is given in Table 2. Agricultural production is envisaged to increase by 3.5 percent per annum in order to step up GDP growth rate 5 percent. This forms the basis for setting targets of agricultural production in the plan. The target for increase in foodgrains production over the plan period is 16.72 percent and for cash crops 68.08 percent. Weather and the decisions of the farmers however, have been reckoned to be the oversiding considerations in agricultural production.<sup>9</sup> Indeed they act as major constraints to development of agriculture in Nepal.

The total implementation of planned programmes for agriculture is estimated to increase agricultural production by 19.2 percent over the plan period. Targets for foodgrains and cash crops are given in Table 3. The plan also envisages the production of crops as follows:

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9. The Fifth Plan in Brief (Op. Cit) p. 12.

Silk	0.5 Metric ton
Ginger	21100.0 Metric ton
Sutho	3000 0 Metric ton

(See Table 4 for production targets of horticulture, vegetable, livestock, and fish).

Table 2

Allocation of Government Sector Fifth Plan Outlay in Agriculture

(Million Rs.)

	Minimum Programme		Maximum Programme	
	Rs.	%	Rs.	%
1. Agriculture and Resettlement	799.0	43.4	1019.6	44.7
2. Irrigation	706.8	38.4	914.4	40.1
3. Land Reform and Survey	143.1	7.8	143.1	6.3
4. Forest and Conservation	190.8	10.4	201.6	8.9
Total	1839.7	100.0	2278.7	30.2

Source: The Fifth Plan (Kathmandu: National Planning Commission, 1975) p. 64.

Table 3

## Foodgrain and Cash Crop Targets in the Fifth Plan

A. Foodgrain and Potato <sup>1</sup>	Unit	Estimates of 1974/75	Target of 1979/80	Percent increase over Plan Period
1. Production Target	1000 M. T.	4287.80	5004.72	16.72
2. Area under improved seed	1000 Hectre	365.09	911.67	149.71
3. Improved Seed Utilization	1000 M. T.		221.64	
4. Use of Chemical Fertilizer	1000 M. T.		115.43	
<b>B. Cash Crops<sup>2</sup></b>				
1. Production Target	1000 M. T.	446.76	750.95	68.08
2. Area under improved seed	1000 Hectre		77.79	
3. Improved Seed Utilization	1000 M. T.		94.37	
4. Use of Chemical Fertilizers	1000 M. T.		34.65	
<b>C. Per Hectare Production</b>				
Rice	Kilo	1950	2071	6.20
Maize	Kilo	1825	1959	7.34
Wheat	Kilo	1171	1306	11.32
Barley	Kilo	958	976	1.87
Potato	Kilo	5676	5770	1.65
Sugarcane	Kilo	16525	21300	28.89
Jute	Kilo	1110	1332	20.00
Oil seeds	Kilo	576	676	17.36

1. Foodgrains include Rice, Maize, Wheat, Barley, Millets, 'Phaper', 'Daliat', Potato.

2. Cash Crops include Jute, Tobacco, Sugarcane, Cotton, Oilseeds.

Source: The Fifth Plan (Kathmandu: National Planning Commission, 1975). pp. 105-114.

Table 4

## Horticulture, Vegetable, Livestock and Fish Targets in the Fifth Plan

	Unit	Estimates of 1974/75	Targets for 1979/80	Percent Increase
(a) <u>Horticulture</u>				
1. Production target	M. T.	2,54,000	2,70,380	6.44
2. Area covered	Hectre	32,500	40,500	24.61
(b) <u>Vegetables</u>				
1. Production Target	M. T.	4,07,500	6,48,000	59.01
2. Area covered	Hectre	82,000	1,20,000	46.34
(c) <u>Livestock</u>				
1. Meat Production	M. T.	64,839	74,573	15.01
2. Milk	M. T.	5,96,910	6,76,600	13.35
3. Egg	Number	1,95,000	2,26,382	16.09
(d) <u>Fish</u>				
Production Target	M. T.	2,600	5,241	102.00

Source: The Fifth Plan (Op. Cit) pp 130-145.

Irrigation Programme

Irrigation facilities are estimated to be available for additional 145,000 hectares of land for the development of agriculture over the Fifth Plan period. The strategy is as follows:

1. Implementation of 14 major irrigation projects.
2. Implementation of minor irrigation projects to irrigate at least 4316 hectares of additional land. This will include 'tar' and lift irrigation as well.
3. Development of ground water sources, especially through tube-wells.
4. Repair, renovation and extension of projects completed by local people e.g. 'kulos', through financial and technical support.
5. Improvements and renovations of old projects.
6. Feasibility surveys and research.



Irrigation, however, has become the weakest subsector in the agriculture of Nepal. The fourth plan target for provision of additional irrigation facilities was for 1,83,632 hectares but the actual achievement of the first four years has been only 6740 hectares -- an achievement of 3.67 percent of the target.<sup>10</sup>

#### Support programmes

During the Fifth Plan period, a total of Rs 1423.1 million of agricultural credit is estimated to be made available, to support the agricultural programmes for purchase of improved seeds, tools, fertilizers, insecticides, saplings, etc. The credit will be channeled through 573 guided cooperatives and 453 guided village committees, covering more than 3000 village panchayats. Agricultural development bank will be the major institution for channelizing agricultural credit. Agricultural inputs will be supplied by Agriculture Inputs Corporation. Food corporation will supply foodgrains to deficit areas.<sup>11</sup>

During the plan period, 62900 hectares of additional land in the terai will be resettled, out of which 52150 hectares will be cultivated. Moreover, areas will be selected for intensive agricultural development programmes based on agro-climatic conditions, especially for the development of foodgrains and cash crops, horticulture, vegetables, fish and livestock. Foreign aided projects will also continue.

Agricultural research programmes will be continued to develop improved agricultural techniques that lead to increase in productivity. In order to reach the farmers effectively, organizational network will be strengthened for funneling down to the village level the agricultural research, extension, education, credit, fertilizer, seeds etc. in a coordinated and synchronized manner.

Agriculture extension programmes will be conducted at three levels to achieve the specified targets:<sup>12</sup> They are:

1. Agro-education programme,
2. Training programmes to J. T., J. T. A., and leader farmer.
3. Follow-up programmes.

Specified programmes of economic Research and Surveys will be conducted by Food and Agriculture Marketing Services department.

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10. See Ibid. p. 12. Also see the Fifth Plan, Op. Cit. pp. 231-246.

11. See The Fifth Plan (Op. Cit) pp. 217-230.

12. For details see Ibid pp. 122-128.

The first years of the plan, i. e. 1975/76, was declared as Agriculture Year. Special programmes were prescribed. The year is already over but the experiences of its achievement are rather not very encouraging in terms of the development of agriculture in Nepal.

### Land Reform Programme

The existing land reforms programme will be reviewed with the objectives of ending exploitation and evolving gradually a system of peasant proprietorship on land.<sup>13</sup> The following programmes have been stipulated:

1. Reintroduction of compulsory savings scheme to raise Rs. 85 million.
2. Protection of tenancy rights by distribution of certificates.
3. Sales of excess land beyond the allowable limit.
4. Fixation of rent.
5. Land Administration (upto date records in 46 districts).
6. Research and surveys about land reform programme.
7. Land survey of 5,60,000 hectares of land.

### Agriculture Sector in Perspective

It is clear from the foregoing discussion that agriculture occupies the leading place in terms of priority as well as financial outlay in the Fifth Plan. Specific targets have been fixed for each subsector. However, comprehensive data about the actual performance of the plan over the last two and half years of its implementation is not yet available. News reportings every now and then indicate poor performance. This may indicate 'ideal' targets in the plan.

### Industry Sector in the Fifth Plan

Nepal is industrially very backward. Development of industrial sector, however, is essential to complement and aid the development of agriculture sector. The fifth plan deals with industry, commerce and electricity as one sector in terms of outlay. See Table 5 for allocation of public sector plan outlay in this sector.

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13. For elaboration see Ibid. pp. 245-257.

Table 5

## Allocation of Public Sector Outlay in Industry Sector in the Fifth Plan

(Million Rs.)

Sub-sector	Minimum Programme		Maximum Programme	
	Rs.	%	Rs.	%
1. Industry	483.5	35.0	531.0	35.3
2. Cottage Industry	58.3	4.2	58.3	3.9
3. Tourism	20.0	1.4	20.0	1.3
4. Mining	55.2	4.0	63.2	4.2
5. Labour	3.5	0.3	3.5	0.2
Total for industry	620.5	44.9	676.0	44.9
6. Commerce	23.0	1.7	30.0	2.0
7. Electricity	737.2	53.4	800.0	53.1
Grand Total	1380.7	100.0	1506.0	100.0

Source: The Fifth Plan (Op. Cit.) pp. 64-65.

This paper will deal only with industry, Cottage industry, tourism and mining subsectors of the industry sector in the Fifth Plan.

### Objectives of Industry Sector

The objectives of industrial development in the Fifth Plan are as follows:<sup>14</sup>

1. To make quantitative as well as qualitative improvements in industrial production and productivity.
2. To increase employment opportunities for transfer of excess labour employed in agriculture.
3. To mobilize local capital, skills and resources to the maximum extent possible.
4. To achieve self-sufficiency in essential consumer goods and some construction materials.
5. To reduce regional economic disparities.
6. To improve balance of payment position through export promotion and import substitution.

In order to achieve the above objectives, the following policies have been specified:

14. For details about industry sector see Ibid, pp. 379-395.

1. Investment in industries will be made more attractive than that in foreign trade, land transactions, contracts and other activities.
2. Defence and public utility industries will be solely in the public sector, Other industries can be in the public or private or joint sectors.
3. If private sector does not establish the industries prescribed for it, or where the government deems it desirable such industries will be established in the public sector.
4. Except pilot projects, only large scale industries will be established in the public sector.
5. Industrial licencing and industrial loans precedures will be made scientific and simple.
6. Industrial facilities will be specified in the licence.
7. Facilities will be based on the nature, investment and employment aspects of new industries; interest rate on loans will be differentiated.
8. Measures will be taken to utilize the existing capacity of established industries.
9. Tax on industrial production will be based on production.
10. Industries will be encouraged to modernize and expand through grant of various facilities.
11. Cottage and small scale industries subsector will be reserved for Nepalese nationals. Foreign investment will be encouraged in medium and large scale industries.
12. Industrial facilities will be based on regional considerations.
13. Labour-intensive techniques will be encouraged unless technical considerations dictate otherwise.
14. Coordination will be achieved in granting various facilities to industries so that the environment of confidence can emerge.

#### Priorities for Industrial Development

The priorities for industrial development have been prescribed as follows in the Fifth Plan:

1. Industries already in the construction stage.
2. Essential consumer goods and construction material industries
3. Indigeneous raw materials and natural resource based industries
4. Medium and small scale industries unless technical considerations require the establishment of large scale industries.

#### Industrial Development Programmes in Public Sector

The programmes for industrial development in the public sector have been classified as follows in the Fifth Plan:

1. Improvements in Established Public Sector Industries:

Major emphasis on internal management, management and accounts training, quality improvements and market diversification. Generally, new production capacity will not be added. Table 6 gives the production targets for public sector industrial enterprises.

2. Carry over Industries to be Completed in Fifth Plan:

These enterprises commenced construction in the fourth plan but will be completed in the Fifth Plan. They are:

- a) Cotton Textile: Capacity 10 million meters of textiles
- b) Lime: Capacity 18000 metric tons
- c) Vegetable ghee: Capacity 6000 metric tons
- d) Bhaktapur Brick Tile: Capacity 20 Million bricks
- e) Vegetable oil: Capacity 5000 metric tons.

3. New Public Sector Industries in the Fifth Plan:

The following new industries are planned to be set up in the public sector over the fifth plan period:

- a) Rosin and Turpentine: Capacity rosin 2900 M. T. and Turpentine 7,37,000 litres.
- b) Magnesite & F. M. P. Fertilizer: Capacity 45,000 M. T. Magnesite
- c) Paper and Pulp
- d) Cement: Capacity 1,70,000 metric tons.

4. Industrial Districts

Expansion of Patan, Hetauda, Balaju, Pokhara, Butwal, Nepalgunj, Dharan industrial districts.

5. Industrial Services Centre

This will be established to provide institutional support for feasibility studies, consultancy services, training, and management of industrial districts.

6. Institute of Standards:

This will be established for quality control of industrial productions.

Table 6

Production Targets for Public Sector Enterprises in the Fifth Plan

Factory	Unit	1975/76	1979/80
1. Birgunj Sugar	M. T.	5000	15000
2. Agricultural Tools	Rs. 1000	8358	12269
3. Janakpur Cigarette	Million Sticks	3000	4000
4. Leather & Shoe	Pairs 1000	150	300
5. Brick & Tile	Million Bricks	22.5	22.5
6. Tea Development Crop.	1000 Kg.	55.5	172.5
7. Tobacco Development Co.	M. T.	3000	5400

Source: The Fifth Plan (Op. Cit.) p. 383

Industrial Programme for the Private Sector

The fifth plan has prescribed 127 new industries to be established in the private sector involving Rs. 400-500 million investment. Nepal Industrial Development Corporation will be provided with Rs. 140 million to provide loans to private sector industries. The new industries visualized are:<sup>15</sup>

Agro-oriented	50
Forest-oriented	12
Mining-oriented	13
Miscellaneous	<u>52</u>
Total	<u>127</u>

The private sector has been looked upon as a complementary sectors to the public sector as far as industrial programmes of the Fifth Plan is concerned:

Cottage Industry Programme

The cottage industry development programme in the Fifth Plan aims at creating employment opportunities, use of local raw materials, promotion of traditional handicraft products and reduction in regional disparities. Certain products have been reserved exclusively for production in this sector. The following programmes have been prescribed:<sup>16</sup>

15. For details see Ibid, pp. 388-389.

16. See Ibid, pp. 396-406.

1. Technical support through surveys in 25 districts, feasibility studies in five areas, scheme preparations, technical advice, etc.
2. Handicraft promotion, especially to aid the promotion of tourism.
3. Technical training in four development regions.
4. Production to the tune of Rs. 4.5 million. Also Rs. 9.3 million worth of textile production from 'Kaasagar Karkhana' (Jail Factory).
5. Loan, amounting to Rs. 25.3 million for cottage, village and handicraft industries.
6. Pilot projects, one each in each development region.
7. Marketing through 7 units of cottage industries and handicraft emporium. Also supply of raw materials through this emporium to cottage industries.

The above programmes will be implemented by 3 regional offices and 26 district office, in addition to the central directorate.

#### Tourism Development Programme

Nepal has tremendous potential for tourism development. The fifth plan objectives in this subsector are to earn foreign exchange, to promote local crafts, to maintain regional balance in its development, and to promote inter-regional tourism. The policies are to preserve the historical, cultural and geographical specialities of the country, to spread the growth of tourism outside Kathmandu valley, and to provide training, facilities and information for its development. The programmes aim at implementing "Tourism Master Plan". Promotion at the international level has been emphasized. Hotel Tourism Training Centre will provide training to 500 persons during the Plan period.<sup>17</sup>

#### Mining Development Programme

Mining development is essential for economic development. The fifth plan aims at promoting mining-oriented industries through systematic and scientific surveys, research, feasibility, studies evaluation, and experimental processing, etc. of mineral resource. Explorations will be done for oil and gas.<sup>18</sup>

#### Industry Sector in Perspective

The specific targets laid down in the Fifth Plan for industry have been made clear in the above discussion. However, if past experience is any guide, this sector has severally suffered from overambitious targets, especially for the industries in the private sector. The actual performance has been far behind the projected targets. The Fifth

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17. See Ibid, pp. 415-420.

18. See Ibid, pp. 425-442.

Plan, it seems, also suffers from the 'ideal target' weakness. Moreover, the leading role given to the public sector and the lack of coordination in government agencies in implementing programmes may prove to be detrimental to the development of this sector.<sup>19</sup>

### Conclusion

Agriculture and industry are the two interdependent sectors which occupy significant places in Nepal's Fifth Plan. Agriculture has to play the role of leading sector in Nepal for quite some years in the future. It must provide resources for non-agricultural sectors, support increasing government expenditure, increase exports, generate additional employment to at least 1,00,000 persons every year, and feed the increasing population.<sup>20</sup> In the Fifth Plan, agricultural production must increase by 3.5 percent per annum to achieve the growth targets.

This paper has made a general survey of the objectives, policies, priorities and programmes presented for the agriculture and industry sectors in the Fifth Plan. The targets set indicate a rosy picture in Nepal's development drama. However, the past plans have been for short in terms of achievement of the targets, especially due to serious gaps in implementation.<sup>21</sup>

The proof of pie is in eating. The effectiveness of the Fifth Plan will solely be determined on the basis of target achievements. For this, we have to wait till the completion of the plan. Let us hope, the performance will be better this time.

Nepal is by all means an agricultural country. Its development strategy must, therefore, revolve around and zero in on Agriculture Sector. Other sectors must complement and aid the development of agriculture sector, at least in the near future.

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19. See Govind R. Agrawal, Private Sector in the Development of Nepal's Trade and Industry (Kathmandu: Nepal Chamber of Commerce, 1978) Forthcoming Publication.

20. See Prakash C. Lohani Some Observations on Economic Growth in Nepal (Kathmandu: Nepal Council of World Affairs, 1976), p. 61.

21. See Govind R. Agrawal, Management and Development (Op. Cit.) pp. 9-12.