

ASIAN DEVELOPMENT BANK

TAR: NEP 32243

TECHNICAL ASSISTANCE
(Financed from the Japan Special Fund)

TO THE

KINGDOM OF NEPAL

FOR

AGRICULTURE SECTOR PERFORMANCE REVIEW

November 2000

CURRENCY EQUIVALENTS

(as of 10 November 2000)

Currency Unit	–	Nepalese Rupees (NRe/NRs)
NRe1.00	=	\$0.01339
\$1.00	=	NRs74.672

- (i) The Nepalese rupee is pegged to the Indian rupee (Re) at a rate of NRs1.60 = Re1.00, and is fully convertible on all current account transactions.
- (ii) For calculations in this report, the exchange rate used is NRs70.40 = \$1.00, the rate prevailing at fact-finding.

ABBREVIATIONS

ADB	–	Asian Development Bank
APP	–	Agriculture Perspective Plan
ha	–	hectare
MOAC	–	Ministry of Agriculture and Cooperatives
NGO	–	nongovernment organization
TA	–	technical assistance

NOTES

- (i) The fiscal year (FY) of the Government of Nepal ends on 15 July. FY before a calendar year denotes the year in which the fiscal year ends, e.g. FY2000 ends on 15 July 2000.
- (ii) In this report, "\$" refers to US dollars.

I. INTRODUCTION

1. His Majesty's Government of Nepal requested assistance from the Asian Development Bank (ADB) for an agriculture sector performance review.¹ This technical assistance (TA) is based on the discussions between the Government and ADB during the Rural Asia Workshop jointly organized in February 2000 by the Government, the Food and Agriculture Organization of the United Nations, and ADB. The ADB Reconnaissance Mission visited Nepal in March 2000 and Fact-Finding Mission in July 2000. These missions met with representatives of Government agencies, the private sector, nongovernment organizations (NGOs), and major bilateral and multilateral funding agencies in Nepal. The missions' findings and understandings with the Government form the basis for the TA design. The TA is included in the ADB's country assistance plan for 2000. The TA framework is in Appendix 1.

II. BACKGROUND AND RATIONALE

2. In Nepal, agriculture has a dominant role in the national economy, accounting for about 80 percent of the total labor force and about 40 percent of gross domestic product. Of the total land area of 14.7 million hectares (ha), 2.9 million ha or 20 percent are cultivated. About 70 percent of agricultural landholdings are less than 1 ha in size. These landholdings are highly fragmented with an average of four parcels of land per farm household in the country.² Agricultural landholdings in the hilly and mountainous regions are more fragmented reflecting the scarcity of contiguous land. Six major crops, including rice, maize, wheat, millet, barley, and potatoes, account for more than 80 percent of the gross cropped area. The irrigable area is estimated at 2.2 million ha or 76 percent of the total cultivated area, of which about 1.1 million ha receive some form of irrigation. Most farmers are engaged in subsistence-oriented food-grain production. Livestock contributes to about 15 percent of the farm household income. More than half of farm households are engaged in livestock activities such as raising cattle, goat, buffalo, and poultry.

3. Based on the altitude differences between the south and the north, Nepal can be broadly divided into three distinctive ecological regions: lowland, hilly, and mountainous. A large-scale migration of people from the hilly and mountainous regions since the 1950s has led to rapid population growth in the lowlands. This has somewhat alleviated the serious food deficit situation in the hilly and mountainous regions, but resulted in rapid degradation of large forest areas in the lowlands as they were converted into agricultural land. In addition, intensive cropping over many years with inadequate nutrient replenishment and poor cultivation techniques has degraded the soil nutrient status of farms in the lowland region.

4. High priority has been given to the agriculture sector in public expenditures with about one quarter of the country's development budget allocated to the sector during the last five years. However, the yield of major food crops has been increasing slowly. The yield of rice and wheat in Nepal is the lowest in South Asia, although it was the highest in the region about 40 years ago.³ Nepal's food-grain production increased by an average of 1.8 percent per annum between FY1991 and FY1998, while the population increased by an average of 2.3 percent per

¹ The TA first appeared in *ADB Business Opportunities* (Internet) on 23 June 2000.

² Central Bureau of Statistics. 1999. *Statistical Yearbook of Nepal 1999*. His Majesty's Government of Nepal, Kathmandu.

³ National Planning Commission. 1995. *Nepal: Agriculture Perspective Plan*. His Majesty's Government of Nepal, Kathmandu.

annum. Thus, per capita food-grain production declined from 315 kilograms in FY1991 to 290 kilograms in FY1998. Nepal has been a net food importer for more than a decade.

5. To reverse this disappointing performance, the Government launched important policy and institutional reforms for the agriculture sector in line with the 20-year Agriculture Perspective Plan (APP) and the Second Agriculture Program.⁴ The APP has been adopted by successive governments since approval in 1995, and aims to (i) accelerate agricultural growth by increasing total factor productivity, (ii) reduce poverty and improve the people's standard of living particularly in rural areas, and (iii) transform the subsistence-oriented agriculture into a commercial one by diversifying and increasing interregional trade in the country.

6. The APP's strategy for developing the lowland region is basically a green revolution package with a combination of improved seeds, fertilizer, and controlled water supply for intensified crop production. The strategy for the hilly and mountainous regions emphasizes the promotion of high-value agriculture and livestock products. These products offer the opportunity for high income per unit area, which is particularly important in areas where agricultural land is extremely limited. The APP stresses the need for greatly expanded agricultural trade interactions between the hilly and mountainous regions and the lowland region in view of the potential complementarity between regions. To establish such linkage, the APP calls for a market-oriented approach based on the initiatives of the private sector.

7. Initially, implementation of the APP was not smooth. Agricultural growth lagged behind the APP target figures, and the record in fulfilling the key policy and institutional reforms was mixed. Subsequently, important developments were accomplished in deregulating the agriculture sector. In the fertilizer trade, substantial progress was made by removing fiscal constraints to increasing the supply of fertilizers and private sector participation in the trade. Imported fertilizer volume has increased by more than 50 percent since the fertilizer trade was deregulated in 1998. In the irrigation subsector, the new irrigation policy approved in 1997 increased the level of beneficiary participation and accelerated the rate of management transfer of surface schemes to water user groups. The Government introduced measures to increase water use efficiency by improving the collection of water user fees and reducing subsidies for groundwater irrigation schemes. Reforms were also initiated to streamline agricultural corporations in the public sector and redefine their roles.

8. These reform measures were introduced over three years since 1997. The Government is now at a critical stage to ensure the sustainable impact of these measures and the smooth transition of the agriculture sector to the market-oriented framework. For instance, despite the deregulation of markets for agricultural inputs, private sector participation in the trade of fertilizers and seeds needs to be further promoted. In irrigation, the Government needs to continue its efforts to transfer responsibility for operation and maintenance of the public irrigation schemes to water user associations, and to promote irrigation development in the lowland region. To expedite APP implementation, increased efforts are required to improve the performance of other subsectors by introducing specific action plans.

9. Under these circumstances, this TA will conduct a comprehensive sector performance review, including assessing the outcome and impact of the Government's reform measures on the overall economy and on the Government's primary development objective of poverty reduction. Based on this review, specific action plans for agricultural development will be developed and implementation initiated. The priority strategic areas broadly identified by the

⁴ Loan 1604-NEP[SF]: *Second Agriculture Program*, for \$50.0 million, approved on 22 January 1998.

APP will be elaborated under the TA so that the Government can focus its efforts on measures to facilitate APP implementation. During TA preparation, discussions were held with key stakeholders in both the public and private sectors, and major external funding agencies. A participatory process based on extensive consultations with these stakeholders will be adopted during TA implementation. This will enhance ADB's dialogue and collaboration with other external funding agencies, and promote concerted efforts to examine and address issues in the agriculture sector.

III. THE TECHNICAL ASSISTANCE

A. Objective

10. The objective of the TA is to help the Government conduct a comprehensive review of agriculture sector performance and formulate measures to facilitate APP implementation.

B. Scope

11. The TA will (i) conduct an analytical review of the current situation and performance of the agriculture sector in Nepal, (ii) assess the progress and impact of the Government's reform measures launched under the APP and the Second Agriculture Program, (iii) examine processes and mechanisms to sustain the effects of such reform measures, (iv) identify critical issues and gaps remaining as constraints to APP implementation and to overall agricultural development, and (v) assist the Government in preparing specific medium-term action plans for agricultural development in line with the APP. The TA will contribute to the agriculture and rural development section of the forthcoming Tenth Plan (FY2003–FY2007) of the Government. The TA will be implemented through a wide consultation process in the country, involving key stakeholders in the sector including farmers, local administrations, NGOs, private dealers of agricultural inputs and outputs, and other external funding agencies, so that general consensus and ownership for implementation of sector reforms will emerge. The outline terms of reference for the consulting services under the TA are in Appendix 2.

C. Cost Estimates and Financing Plan

12. The TA is estimated to cost \$710,000 equivalent, comprising \$441,000 in foreign exchange costs and \$269,000 equivalent in local currency costs. ADB will provide \$600,000 to finance the entire foreign exchange costs and a part of the local currency costs, amounting to \$159,000 equivalent. The TA will be financed by ADB on a grant basis from the Japan Special Fund, funded by the Government of Japan. The balance of the local currency costs, amounting to \$110,000 equivalent, will be met by the Government from its own resources to cover office accommodation, counterpart staff support, facilities for seminars and meetings, and other administrative expenses at the central and local levels. Data and information required for TA activities will be provided by the Government. A Government representative will be invited as an observer for TA contract negotiations. The detailed cost estimates are in Appendix 3.

D. Implementation Arrangements

13. The Executing Agency for the TA will be the Ministry of Agriculture and Cooperatives (MOAC). MOAC will establish a TA implementation unit, and appoint a TA project director and at least one full-time counterpart staff assigned to the TA. District offices of MOAC's Department of Agriculture will provide necessary field support for TA activities, including liaison with relevant agencies and translation. Since the TA will cover several subsectors encompassing different ministries, the Government will need to establish an interministerial TA steering committee and a counterpart working group to ensure a holistic approach to the TA through effective interactions and coordination of the relevant ministries. This committee will be in place before TA inception. The committee will be chaired by the secretary of MOAC and include representatives from the National Planning Commission, Ministry of Finance, Ministry of Water Resources, Ministry of Local Development, Ministry of Forest and Soil Conservation, Nepal Rastra Bank, other relevant Government agencies, and at least two representatives of the private sector, including those of the Federation of Nepal Chambers of Commerce and Industry, and major NGOs involved in the agriculture sector. The committee's meetings will be organized prior to the tripartite review meetings to consolidate the committee's views on the TA. The TA project director will act as a member-secretary for the committee. The counterpart working group will comprise staff of the Government and private sector agencies to closely work with the TA consulting team. ADB will form a task force, comprising staff of the relevant ADB departments and offices, to review the TA outputs.

14. The TA will be implemented over nine months from February to November 2001. Tripartite review meetings of the Government, the TA consultant, and ADB will be chaired by the MOAC secretary, and organized three times to review TA implementation progress, resolve any outstanding issues, and provide necessary guidance to the TA consultants.

15. The TA requires 15 person-months of international consulting services in the fields of (i) agricultural policy and team leadership, (ii) institutional assessment, and (iii) rural finance; and 30 person-months of domestic consulting in the fields of (i) agricultural economics and deputy team leadership, (ii) irrigation, (iii) agriculture, (iv) forestry and environment, (v) livestock, (vi) agrarian law, and (vii) social and participatory assessment. These consulting services will be provided by an international consulting firm in association with qualified domestic consulting firms that have sound financial positions, sufficient experience and knowledge in the agriculture sector, and an adequate number of qualified staff.

16. The selection and engagement of the TA consultant will be undertaken in accordance with ADB's *Guidelines on the Use of Consultants* and other arrangements satisfactory to ADB for the engagement of domestic consultants. The technical proposals invited from the shortlisted consulting firms will be in ADB's simplified formats. The consultant will purchase necessary office equipment in accordance with ADB's *Guidelines for Procurement*. The equipment procured under the TA will be handed over to MOAC at TA completion. The consultant will organize a series of stakeholder meetings at the central and local levels during the TA. National and regional seminars will be organized before the TA's interim and final tripartite review meetings. The consultant will ensure participation of key public and private sector stakeholders in these meetings and seminars. These processes are also important to build general consensus and ownership among the stakeholders for the implementation of further sector reforms.

17. The consultants will prepare (i) an inception report including a detailed TA work program, to be submitted within three weeks of TA inception and discussed at the inception

tripartite review meeting; (ii) an interim report to be submitted within four months of TA start-up, which will present the interim TA findings, and will be discussed at regional seminars, stakeholder meetings, and the interim tripartite review meeting; (iii) a draft final report within seven months of TA start-up, to be discussed at the regional and national seminars, and at the final tripartite review meeting; and (iv) a final report at TA completion. In addition, technical discussion papers will be prepared for the seminars and meetings; the proceedings will be recorded. The interim report will consist of an executive summary and a main report. The draft final and final reports will comprise an executive summary, a main report, subsector reports, and appendixes containing relevant data and information. Twenty copies of each report will be prepared, including 5 copies for ADB and 15 for the Government. In addition, the executive summary and the main report of the final report will be translated into Nepali, and 100 copies of the executive summary and 15 copies of the main report will be provided to the Government for circulation to relevant parties, including district development committees. Data and information prepared and stored in electronic computers will be provided to ADB and the Government in a readily usable format.

IV. THE PRESIDENT'S DECISION

18. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance, on a grant basis, to His Majesty's Government of Nepal in an amount not exceeding the equivalent of \$600,000 for the purpose of the Agriculture Sector Performance Review, and hereby reports such action to the Board.

TECHNICAL ASSISTANCE FRAMEWORK

Design Summary	Performance Indicators	Monitoring Mechanisms	Assumptions and Risks
<p>Sector/Area Goal</p> <p>Sustainable growth in agricultural production</p> <p>Reduction in rural poverty</p>	<ul style="list-style-type: none"> • Average sector growth rate sustainable at about 5 percent per annum by 2015 in line with the Agriculture Perspective Plan (APP) • Annual per capita food-grain production to reach 426 kilograms by 2015 in line with the APP • Yield of major crops reaching the levels of other South Asian countries • Poverty incidence to decrease to about 14 percent by 2015 in line with the APP • Human development index to substantially increase from the current estimate of 0.474 to higher than 0.500 to qualify for the medium human development 	<ul style="list-style-type: none"> • Economic survey and national statistics for the agriculture sector • Regular dialogue and interactions with key stakeholders, including farmers, local administrations, private traders, nongovernment organizations, and major external funding agencies • Local consultative group meetings of external funding agencies in Nepal • Asian Development Bank (ADB) review missions and tripartite review meetings for the technical assistance (TA) • Progress reports and other consultant reports prepared under the TA • TA completion report 	<p>Political stability in the country</p> <p>Favorable weather conditions</p> <p>Reduction in population growth</p> <p>Establishment of a better public-private partnership for agricultural development</p>

Design Summary	Performance Indicators	Monitoring Mechanisms	Assumptions and Risks
<p>Purpose</p> <p>Comprehensive review of agriculture sector performance for effective implementation of the APP</p>	<ul style="list-style-type: none"> • Environment favorable for private sector participation created • Effective tripartite relationship among the public sector, private sector, and external funding agencies in place 	<ul style="list-style-type: none"> • Regular dialogue and interactions with key stakeholders. • Local consultative group meetings among external funding agencies in Nepal • ADB review missions and tripartite review meetings for the TA • Progress reports and other consultant reports prepared under the TA • TA completion report 	<p>Accuracy in the APP's analysis of basic weaknesses in the country's agriculture sector</p> <p>Continued Government commitment to its policy for economic liberalization</p> <p>Timely support from external funding agencies for the Government's policy and institutional reforms</p>
<p>Outputs</p> <p>1. Priority areas of study identified for each subsector</p> <p>2. Agriculture sector performance assessed, and sector issues and implementation gaps in the APP identified</p>	<ul style="list-style-type: none"> • Inception report outlining TA activities and work program within three weeks of TA inception • Within three months of TA inception 	<ul style="list-style-type: none"> • Inception tripartite review meeting for the TA • Stakeholder meetings at TA inception • Regional seminars to present the interim TA findings • Interim tripartite review meeting for the TA 	<p>Active participation of key stakeholders in a series of meetings</p> <p>Logistics support required for the TA in place</p> <p>Active participation of key stakeholders in the regional seminars</p> <p>Effective cooperation from the Government and provision of access to necessary data and information</p>

Design Summary	Performance Indicators	Monitoring Mechanisms	Assumptions and Risks
3. Specific medium-term action plans for the sector presented	<ul style="list-style-type: none"> Interim report within four months of TA inception 	<ul style="list-style-type: none"> Regional seminars to present the interim TA findings Interim tripartite review meeting for the TA 	<p>Active participation of key stakeholders in the regional seminars</p> <p>Close consultation with the relevant Government agencies and other stakeholders</p>
4. Critical sector issues and implementation gaps in the APP examined	<ul style="list-style-type: none"> Draft final report and subsector reports within seven months of TA inception 	<ul style="list-style-type: none"> Regional and national seminars to present the final TA findings Final tripartite review meeting for the TA 	<p>Active participation of key stakeholders in the regional and national seminars</p> <p>Close consultation with the relevant Government agencies and other stakeholders</p>
5. General consensus built on the medium-term action plans	<ul style="list-style-type: none"> At TA completion The TA outcome reflected in the forthcoming Tenth Plan (FY2003-FY2007) of the Government 	<ul style="list-style-type: none"> Regular dialogue with key stakeholders Local consultative group meetings among external funding agencies in Nepal TA completion report 	<p>Active participation of key stakeholders in the regional and national seminars</p> <p>Close consultation with the relevant Government agencies and other stakeholders</p>
6. Agreed action plans prepared	<ul style="list-style-type: none"> Final report at TA completion 	<ul style="list-style-type: none"> TA completion report 	<p>Timely provision of counterpart support</p>
Activities			
1. Review of earlier studies and surveys, and stakeholder meetings	<ul style="list-style-type: none"> Completion within three weeks of TA inception 	<ul style="list-style-type: none"> Inception report Inception tripartite review meeting for the TA 	<p>Timely provision of counterpart support, and acquisition of necessary data and information</p>

Design Summary	Performance Indicators	Monitoring Mechanisms	Assumptions and Risks
2. Participatory field surveys and assessments	<ul style="list-style-type: none"> Completion within three months of TA inception 	<ul style="list-style-type: none"> Interim report Interim tripartite review meeting for the TA 	Provision of adequate counterpart support in the field
3. Review and screening of ongoing and proposed projects and programs in the agriculture sector	<ul style="list-style-type: none"> Completion within three months of TA inception 	<ul style="list-style-type: none"> Interim report Interim tripartite review meeting for the TA 	Provision of access to necessary information on the ongoing and proposed projects Linkage with budgetary allocations and project screening exercises Close consultation with the National Planning Commission and the Ministry of Finance
4. Preparation of specific medium-term action plans for agricultural development	<ul style="list-style-type: none"> Completion within four months of TA inception 	<ul style="list-style-type: none"> Interim report Interim tripartite review meeting for the TA 	General acceptance of the medium-term action plans
5. Finalization of and consensus building for the medium-term action plans for the sector	<ul style="list-style-type: none"> At TA completion 	<ul style="list-style-type: none"> Draft final and final reports Final tripartite review meeting for the TA 	Consensus built on the medium-term action plans for the sector among key stakeholders
Inputs			
1. International consultants	15 person-months	<ul style="list-style-type: none"> ADB review missions and tripartite review meetings for the TA 	Timely recruitment and deployment of consultants
2. Domestic consultants	30 person-months		
3. Total costs involved	\$710,000		
<ul style="list-style-type: none"> ADB financing 	\$600,000		
<ul style="list-style-type: none"> Government financing 	\$110,000		

OUTLINE TERMS OF REFERENCE FOR CONSULTING SERVICES

A. General

1. Technical assistance (TA) activities will be implemented in the following sequence.
2. **Sector Review and Performance Assessment.** The consultants will
 - (i) conduct an analytical review of the agriculture sector and its recent performance based on indicators appropriate for the respective subsectors; relevant studies, reports, and lessons learned from past projects should be fully taken into account;
 - (ii) collect important physical and socioeconomic data and information relating to agriculture and rural development, including soil, topography, hydrology, population, gender, livelihoods, poverty incidence, land-use patterns, and land ownership; and
 - (iii) assess the progress of the Government's recent reform measures launched under the Agriculture Perspective Plan (APP), the ongoing Ninth Plan (FY1998-FY2002), and the Asian Development Bank (ADB)-financed Second Agriculture Program, and their impact on the overall economy, the agriculture sector, and the rural poor.
3. **Problem Analysis.** The consultants will
 - (i) examine the issue of public interventions and subsidies in the agriculture sector in Nepal, particularly in relation to the fertilizer trade and the irrigation investment, with due consideration for the situation in the bordering states of India;
 - (ii) carry out participatory field assessments, and organize consultation meetings with key stakeholders in the public and private sectors; and
 - (iii) identify and examine major issues and constraints to further development of the agriculture sector.
4. **Formulation of Action Plans.** The consultants will
 - (i) examine the ongoing and proposed investment projects and programs in the agriculture sector, in consultation with the Government, external funding agencies, and the private sector; their impact on incremental income and employment opportunities, and environmental and social conditions should be fully considered;
 - (ii) estimate the overall resource requirements for these projects and programs, and help identify possible sources of financing; and
 - (iii) formulate specific medium-term action plans for the agriculture sector covering the next five years with due consideration for their impact on poverty reduction and food security, and for Nepal's entry into the new trade regime under the World Trade Organization.
5. **Consensus Building.** The consultants will
 - (i) help formulate a general consensus for the implementation of the medium-term action plans among key stakeholders through national and regional seminars, and consultation meetings; and

- (ii) recommend appropriate institutional mechanisms to implement the action plans, and monitor their progress.

B. Specific Work Assignments for Consultants

6. The specific work assignments of the individual consultants will include the following.

7. **Agricultural Policy Specialist and Team Leader (international, 9 person-months).** The specialist will

- (i) organize and lead a series of stakeholder meetings, field surveys, and regional and national seminars under the TA; ensure participation of key stakeholders, including the relevant Government agencies, external funding agencies, nongovernment organizations (NGOs), farmer groups, and cooperatives;
- (ii) evaluate the performance of the past projects in the agriculture sector financed by ADB and other external funding agencies; and identify useful lessons learned to be considered for the preparation of future projects and programs, and medium-term action plans for the sector;
- (iii) assess the situation of agricultural production and marketing in comparison with the bordering states of India; and examine the issue of public interventions and subsidies for agriculture;
- (iv) prepare, in collaboration with other consultants, a preliminary list of core investment projects and programs based on appropriate project selection criteria and with due consideration for the ongoing and planned activities;
- (v) formulate, with the use and updating of the growth accounting framework of the APP, possible future scenarios for the performance of the agriculture sector over the next five years in view of the trend and patterns of macroeconomic indicators, migration patterns, alternative policy scenarios, and the flows of domestic and external resources; and
- (vi) lead the consultant team to formulate medium-term action plans for the sector with a view to alternative sector performance scenarios, and based on technical discussion papers for subsectors and the outcome of stakeholder meetings and seminars; and prepare a detailed matrix to indicate such action plans for the improvement of policy and institutional frameworks in line with the APP and the Ninth Plan.

8. **Institutional Assessment Specialist (international, 3 person-months).** The specialist will

- (i) examine, in collaboration with the agricultural economist, the issues of institutions in the agriculture sector, including the progress of the organizational reforms of the Nepal Food Corporation and the Agriculture Inputs Corporation;
- (ii) assess the current institutional framework of the agriculture sector, and the roles and responsibilities of the relevant institutions, including the Ministry of Agriculture and Cooperatives, with due consideration for the ongoing civil service reforms of the Government, the devolution of responsibilities under the Local Self-Governance Act of 1999, and the need for greater involvement of farmer groups, cooperatives and other local stakeholders; and
- (iii) identify and recommend specific measures for the improvement of governance and human resource development in the agriculture sector; initiate, in collaboration with the counterpart working group, actions to institutionalize

recommended measures into the respective institutions; and formulate preliminary schedules for such actions.

9. **Rural Finance Specialist (international, 3 person-months).** The specialist will

- (i) assess the current situation of rural finance in Nepal, including corporate and financial management of the relevant financial institutions, legal and regulatory framework, market conditions, need for increased participation of private financial institutions, and the impact of rural finance on the poor;
- (ii) examine important factors restricting the growth of rural finance as the source for financing effective rural development activities to generate income and employment opportunities in the rural area; and recommend, with a view to the medium-term rural finance strategy for Nepal,¹ specific measures to remove such constraints for inclusion in the medium-term action plans; and
- (iii) estimate the demand for rural credit of various terms and conditions; and identify the specific uses of such funds and clientele.

10. **Agricultural Economist and Deputy Team Leader (domestic, 9 person-months).** The specialist will

- (i) assess the current investment program of the agriculture sector under the Ninth Plan and the annual budget based on the resource requirements for the ongoing and proposed projects and programs;
- (ii) examine and monitor, in collaboration with the institutional assessment specialist, the institutional issues in the sector, including the progress of reforms under the ADB-financed Second Agriculture Program;
- (iii) assess through interactions with the private sector the current situation of agribusiness development in the country, including its demand for rural energy; and examine the potential for its growth and contributions to agriculture sector growth;
- (iv) prepare, in collaboration with the agriculture specialist, typical farm budget models based on different cropping patterns for the lowland region and for the hilly and mountainous region, fully taking into account the past studies and reports in Nepal to present farmers' financial conditions in different regions;
- (v) study successful facilities for agricultural marketing, including local markets, collection centers and storage facilities, and the currently available market information systems; and recommend appropriate policies and measures for the improvement of agricultural marketing systems in Nepal;
- (vi) examine issues relating to Nepal's entry into the new trade regime under the World Trade Organization; and recommend specific measures to address such issues;
- (vii) incorporate, in collaboration with the counterpart working group, recommendations under the TA into the medium-term action plans for the sector and so that the TA outputs will be adequately reflected in the forthcoming Tenth Plan (FY2003—FY2007) of the Government; and
- (viii) ensure, in collaboration with the agricultural policy specialist, that the medium-term action plans and the matrix are consistent with the subsector reports to be prepared under the TA; and help facilitate the process to build consensus among the key stakeholders for the implementation of the medium-term action plans for the agriculture sector.

¹ Asian Development Bank. 2000. *Rural Finance Strategy in Nepal - A Medium-Term Strategy*. Manila.

11. **Irrigation Specialist (domestic, 4 person-months).** The specialist will
- (i) examine the current issues of irrigation development in the country, including inadequate resources and systems for operation and maintenance, need for partnership between public and private sectors, and provision of support for water user associations; and assess the potential for irrigation development and appropriate modes for areas of different geographical and hydrological conditions;
 - (ii) examine the current program for irrigation development and its resource requirements, including energy consumption and demand for irrigation; review the existing irrigation subsidies; and identify priority areas to be considered in the future program for irrigation development; and
 - (iii) recommend specific action plans for future irrigation development and an appropriate institutional framework with particular emphasis on the sustainability of irrigation schemes, on-farm water management, involvement of communities and farmer groups, and need for the rehabilitation of existing schemes.
12. **Agriculture Specialist (domestic, 3 person-months).** The specialist will
- (i) identify important commercial crops for different ecological regions based on their soil, climatic, topographical, and current marketing conditions; and present region-specific agronomic requirements for increasing productivity such as soil treatment, nutrient balance for soil, pest management, seed production, planting, and postharvest operations;
 - (ii) describe typical cropping patterns and crop budgets for different ecological regions; and examine the availability of quality planting materials and the capacity of local nurseries and research stations to support increased production of such crops;
 - (iii) examine the current issues involved in crop production, including the need to provide effective agricultural extension services and to strengthen the linkage between research and extension; and
 - (iv) recommend specific policies and other measures to resolve the current issues and increase agricultural productivity.
13. **Forestry and Environment Specialist (domestic, 4 person-months).** The specialist will
- (i) examine the current issues of the forestry sector in Nepal, including weak institutional capability for policy planning and implementation, need for increased collaboration between the public and private sectors for community-based approaches, and improvement of forest research and extension activities;
 - (ii) identify the ongoing and proposed forestry and watershed management projects, and their resource requirements; and assess their impact with a view to resolving sector issues;
 - (iii) present the currently estimated forest cover, the current supply of and demand for forest products, patterns of forest management, and people's dependence on forests for fuel and fodder; and
 - (iv) identify medium- to long-term environmental concerns in the agriculture sector and recommend effective measures to address such concerns.

14. **Livestock Specialist (domestic, 3 person-months).** The specialist will
- (i) based on the assessment of animal population, productivity, processing, marketing and institutional support, examine the current sector issues, including inefficient distribution and veterinary services, and the need for privatization and increased women's participation in production and marketing of livestock products;
 - (ii) identify the ongoing and proposed livestock projects, and their resource requirements; and examine the important areas for livestock development such as integration into the farming system, fodder production, research and extension services, and animal health; and
 - (iii) assess the current role of the livestock sector in the national economy based on alternative growth scenarios; and identify and recommend policy and institutional measures for future livestock development.
15. **Agrarian Law Specialist (domestic, 2 person-months).** The specialist will
- (i) examine the legal issues relating to implementation of the Government's policy for market-oriented agricultural development under the APP; and
 - (ii) identify and recommend specific measures to facilitate legislative and regulatory changes required for effective implementation of the APP.
16. **Social and Participatory Assessment Specialist (domestic, 5 person-months).** The specialist will
- (i) ensure that the medium-term action plans for the sector adequately cover important social aspects, including rural poverty, gender, and communal diversities and characteristics, with a view to ADB's *Guidelines for Incorporation of Social Dimensions in Bank Operations*;
 - (ii) conduct preliminary social assessments for the ongoing and proposed projects and programs in the agriculture sector in terms of the relative roles of men and women, and women's empowerment;
 - (iii) organize, in collaboration with the agricultural policy specialist, a series of stakeholder meetings, national and regional seminars under the TA; and ensure that the views of key stakeholders in the agriculture sector are properly reflected in the TA activities and reports; and
 - (iv) disseminate important findings under the TA through stakeholder meetings and seminars to a wide range of people and participants in the meetings and seminars for building consensus on the medium-term action plans for the sector.

COST ESTIMATES AND FINANCING PLAN

(\$)

Item	Foreign Exchange	Local Currency	Total Cost
A. Asian Development Bank (ADB) Financing			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	375,000	0	375,000
ii. Domestic Consultants	0	105,000	105,000
b. International and Local Travel ^a	16,000	13,000	29,000
c. Reports and Communications	0	8,000	8,000
2. Equipment ^b	5,000	0	5,000
3. Seminars and Meetings ^c	0	5,000	5,000
4. Field Surveys ^d	0	5,000	5,000
5. Miscellaneous Administrative Costs ^e	0	8,000	8,000
6. Representative for Contract Negotiations ^f	3,000	0	3,000
7. Contingencies	42,000	15,000	57,000
Subtotal (A)	441,000	159,000	600,000
B. Government Financing			
1. Office Accommodation	0	9,000	9,000
2. Remuneration and Per Diem of Counterpart Staff	0	9,000	9,000
3. Field Transport	0	12,000	12,000
4. Facilities for Seminars and Meetings	0	52,000	52,000
5. Other Administrative Expenses	0	28,000	28,000
Subtotal (B)	0	110,000	110,000
Total	441,000	269,000	710,000

Notes:

- a Including costs for hiring vehicles and for domestic airfares.
- b Procurement of a photocopier.
- c Including costs for a series of local seminars and meetings.
- d Short-term local subcontracts for surveys, including expenses for enumerators.
- e Including office utilities and supplies, and secretarial expenses.
- f Travel expenses for inviting a representative of the executing agency for contract negotiations.

Source: Staff estimates.