



A Quarterly Newsletter of Nepal Agricultural Research Council

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October - December 2000

## Program Planning and Budgeting of NARC

Planning is one of the most important stage in the research cycle when the relevance of research is set in advance with a detailed analysis of existing problems and feed-backs. NARC at present is in the process of annual program planning and budgeting for the Fiscal Year 2001/2002. NARC follows bottom-up approach in planning process. Village level workshops for the feed-backs from clients, farmers, extensionists and NGOs are held at different outreach research sites. Researchers with the feed-backs formulate programs that are submitted to be discussed in respective Regional Planning Workshops. The regional Planning Workshops provide forums

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### ISSUE HIGHLIGHTS

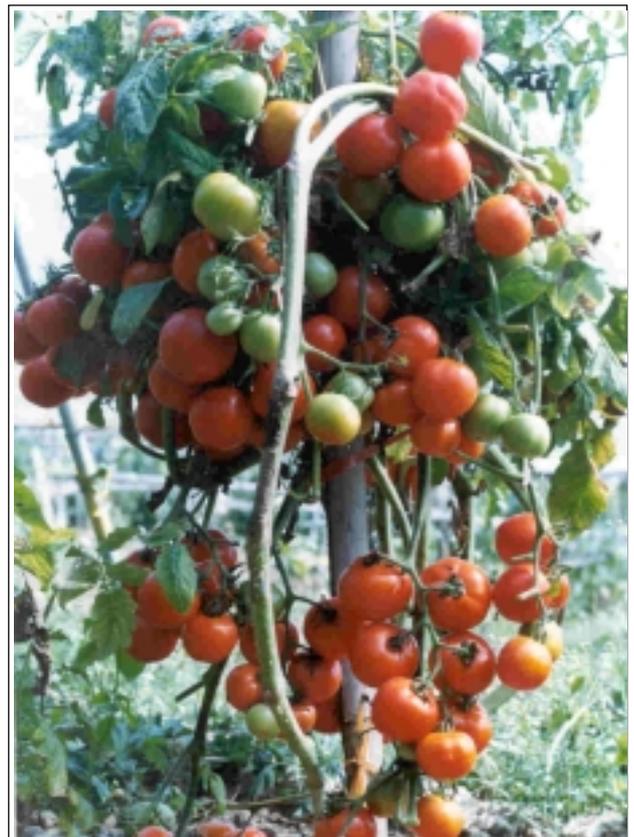
- Off-Season Tomato Cultivation
- Program Planning and Budgeting of NARC
- Seed Delivery Ceremony Held
- Three Decades of NARC-CIMMYT Partnership being observed
- Seminar on NARC Strategy held
- Agriculture Environment Unit in NARC
- Workshop on Agricultural Machinery
- "Vegetables and Pesticides - the Virtual Paradox" - D.N. Manandhar
- "Exchange of Knowledge and Experience in Agriculture Research" - S.B. Pandey

## Off-Season Tomato Cultivation

Off-season vegetable farming is one of the reliable source of income and means of poverty alleviation in the hills of Nepal. Horticulture Research Division of NARC with Horticulture Research Farms and Stations in various agro-ecological zones in the country has been making its efforts for generating high value off-season fresh vegetables production technologies. Currently, high yielding off-season tomato varieties suitable for hills (1300-1800) have been identified along with some cultivation technologies.

The cultivars PS 82639, Dhani, Ladaku, PS 618795, PS 842194, PS 373264, PS 619895 and PS 707196 by use of full package of practices developed are able to produce very attractive and marketable fruit yield from 3 to 6.5 ton per ropani from the month of Ashad to mid Mansir which is the off-season period for tomato in Nepal, India, Bangladesh and China (Lasha and Khasha). The price of the tomato in this

period is very high (the minimum price from Ashad to mid Mansir ranges from Rs.15 to 25 per kg.) The fruits of these varieties have long storage life and can travel and reach long distance markets and is thus suitable for export. These varieties with the technologies have been found capable of producing attractive marketable fruit from 8-12 kg per plant.



With the view to discuss on the draft of the new 10 year-strategy of the NARC, Nepal Agricultural Research Council (NARC) organized a seminar on 14 November 2000 at Khumaltar.

The seminar was participated by researchers, policy makers, planners, extensionists, agro-entrepreneurs, advisors, consultants, representatives from donor and banking agencies, Government organization, NGOs, INGOs, and others.

In the seminar the draft strategies were presented by Executive Director, Dhruva Joshy; Directors, Dr. Nanda Prasad Shrestha and Dr. Bholam Pradhan and the participants made suggestions on issues like the role of researchers in extension; agri-mechanization; communication, publication and documentation; need based research; collaboration with industrial, private, governmental, non governmental organizations.; development of hybrids, National Research and Development Fund etc.

HARP Director, John B Abington; Chairman of CEAPRED, Dr. Hari Krishna Upadhyaya; World Bank Advisor, Dr. Derek; Team Leader of Winrock International, Dr. Ram P. Yadav; Natural Resource Advisor, DFID, Mr. Sam Bickersteth commented on the draft strategy.

### **Three Decades of NARC-CIMMYT Partnership being observed**

A special function is being organized jointly by Nepal Agricultural Research Council (NARC) and International Wheat and Maize Improvement Center (CIMMYT) on 12 February, 2001 to mark the "Three Decades of NARC-CIMMYT Partnership in Maize and Wheat Research and Development." The Director General of CIMMYT, Dr. Timothy G Reeves is attending the function.

### **Seed Delivery Ceremony Held**

Nepal Agricultural Research Council (NARC) distributed seeds of improved wheat varieties to farmers at Katunje, Bhaktapur in a special function organized by Agriculture Botany Division, NARC on 1<sup>st</sup> November 2000.

The improved wheat variety "BL 1473" is developed in Nepal as a cross between "Nepal 297" and "NL 352" and recommended by NARC on the basis of varietal selection after trials on farms in farmers participation.

The varietal selection trials were conducted jointly by NARC, Department of Agriculture, and International Wheat and Maize Improvement Center (CIMMYT) with participation of farmers in Bhaktapur District.

The "BL 1473" has been liked by the farmers for its large spikes, taller plants, non-lodging, high tillering, bolder grains, disease resistance, early maturity and high yielding characteristics. Potential yield of this variety is 4 mt/ha.

The function was attended by Executive Director, Directors and Scientists from NARC; Director General, Deputy Director Generals and other officials from DOA; Joint Secretaries from Ministry of Agriculture and Cooperatives; scientists and officials from CIMMYT; District Agriculture Development Officers from Bhaktapur, Kathmandu and Lalitpur; representatives from Agriculture Input Corporation, local NGOs and farmers.

### **Dhruva Joshy: Chairman to APAARI**

Sixth General Assembly Meeting of the Asia Pacific Association of Agriculture Research Institutes held on 8-10 November 2000 in Thailand elected Mr. Dhruva Joshy, Executive Director of NARC as the Chairman to APAARI for the next two-year term. In the Association, Fiji has been elected as Vice-Chairman and India as the Executive Secretary. Japan, Australia, Malaysia and Bangladesh have been elected as members. APAARI is an organization working since 1990 to strengthen National Agricultural Research Systems in Asian countries. There are 17 member countries in APAARI.

### **Field Observation by Journalists**

As a follow-up of the Wheat Planning Workshop held on 30 Nov.- 1 Dec. 2000, a team of journalists had a field visit to research field and outreach research sites under National Wheat Research Program, Bhairahawa from 6-9 December 2000. The team had on-the-spot observation of research activities and performances in the research fields. The team also visited National Maize Research Program and Grain Legumes Research Program at Rampur.

The visit was arranged by Communication, Publication and Documentation Division of NARC.

**All the readers are requested to help us with comments, suggestions and also to contribute with articles, news & information for this regular Newsletter**

## Agriculture Environment Unit in NARC

NARC is an autonomous apex body at the national level to undertake appropriate agro-technologies suitable to various Agro-ecological Zones (AEZs) for the country's diversified crops, livestock, fisheries, etc.

Agriculture Environment Unit under the Planning and Co-ordination Directorate of NARC, has been established to work support the agricultural environment related researchable issues. The Unit has the following objectives to:

- raise awareness and seek solutions of agriculture related environmental issues for ensuring a safe (minimizing the use of environment prone chemicals, pesticides, etc) and sustainable agricultural development.
- prepare policy guidelines for NARC in conformity with the national environmental policy of Nepal.
- promote the use of renewable natural resources to sustain agricultural growth and economic activity.
- assess and predict climate

change and its impacts on agriculture and vis-à-vis.

- introduce system analysis in agriculture research and development using information technology tools like GIS, Simulation modeling, etc.

### Current Research Activities:

1. Regional collaborative research on the application of CO<sub>2</sub> enrichment technology in rice.
2. Application of EM technology to increase efficiency of nutrient management on field crops.
3. Enabling activities for the preparation of initial national communication related to UN Framework Convention on Climate Change (UNFCCC).
4. To prepare the inventory of meteorological database of different ecological belts of Nepal and analyze in relation to agriculture production system.
5. System approach to address the Rice-Wheat production system using simulation models.

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for exchange of ideas in designing research plans. All the program proposals are reviewed at central level in different panels and finalized for submitting to Board Meeting and to Council for final approval.

NARC, in line with the directives from National Planning Commission and Ministry of Agriculture and Cooperatives, has circulated guidelines for the researchers to design research plans with focus on national goals and the clients' needs.

### Progress Review Meeting of NARC

With the objectives to review the activities and progress in the first four months of the current fiscal year 2000/2001 of commodity programs, disciplinary divisions, regional agricultural research stations, research stations and units under NARC, the first four monthly progress review meeting of was held at Khumaltar on 13 December 2000.

In the meeting progress report from all the respective offices on their research programs and activities were presented and interactions were held. NARC, in the current fiscal year, has over five hundred research programs being conducted by different offices.

### NARC Gender Working Group formed

As a part of the implementation of gender mainstreaming process in NARC, a Gender Working Group has been formed that will coordinate the mainstreaming activities within the organization. The purpose of the Group is to facilitate the implementation of the agreed program of gender training and sensitization activities; delivery of a set of practical guidelines for increasing the relevance of research programs for NARC clients and a

gender strategy that will provide a framework for action, based on the understanding of the meaning of gender, to develop and implement a wide range of gender sensitive research programs in NARC.

The Working Group consists of:

Dr. Rama Bhurtel, Coordinator;  
Mrs. Bimala Sharma  
Mr. Subarna Man Pradhan  
Mr. Naresh Singh Thakur  
Mrs. Sharada Joshi  
Mr. Khadga Bahadur Shrestha  
Mr. Krishna Raj Bhatta

### Training on Gender Mainstreaming in Research

A five-day training program on "Gender Mainstreaming in Agriculture Research" was organized at Khumaltar in December 2000.

In the training the participants were given theoretical and practical knowledge on how to include gender issues in agriculture research programs. The training was participated by 12 researchers from different divisions and stations.

Earlier, a workshop and trainings at various levels were conducted at Khumaltar and Regional Agricultural Research Stations.

## Workshop on Agricultural Machinery

A workshop on “Strengthening Participatory Research Development and Promotion of Agricultural Machinery” was jointly organized by Nepal Agricultural Research Council (NARC) and International Maize and Wheat Improvement Centre (CIMMYT) in Kathmandu on 29 November 2000.

The Workshop Chaired by Mr. Dhruva Joshy, Executive Director of NARC, was attended by researchers, extension workers, Government Officials and representatives from NGOs, INGOs and traders. The workshop aimed at scaling up and broadening the current participatory Research, Development and Promotion programs at Agricultural Engineering Division, Agricultural Implement Research Center, Ranighat and Regional Agricultural Research Stations (Bhairahawa and Parwanipur) to other Regional Agricultural Research Stations/Agricultural Research Stations, Commodity Research Programs and farmers in Nepal.

In the Workshop various issues were raised and recommendations were presented as follows:

- Farmers’ need based R & D through PTD (participatory Technology Dissemination) should be prioritized.
- Local manufactures, importers, dealers of agricultural machinery should be supported by the government policies.
- R & D in the NARC/Country should be well supported for better output.
- Establish mechanization promotion cell headed by agricultural engineers/overseers within District Agricultural Development office.
- Encourage local traders/dealers maintain stock of spare parts
- Collaborative R & D on farm machinery within National and International agricultural agencies be encouraged. (NARC and DOA,

RNAM, CIMMYT, IRRI, ICAR etc.)

- Government policies for the promotion of agricultural mechanization be clearly be outlined in APP.
- Loan acquisition provisions be improved and simplified.
- Encourage small engineering workshops for repair and maintenance of agricultural equipments.
- Establish Agricultural Machinery Testing and Quality Control Institute.
- Provide capital support of low interest loans for the rural artisans.
- Provide manpower training for R & D, education, extension/information dissemination, manufacturing, sales and after sales services for various manpower levels.
- Thrust on R & D and promotion of agriculture machinery in the hills too.

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observation, good laboratory facilities, trained manpower, and an integrated approach. This study should take place extensively both at laboratory and at farm levels. Farmers should be well aware of the type, amount and frequency of pesticides they use it to make the study successful.

- Several samples at different time of the year need to be collected from the field as well as from the wholesale market. Proper procedures need to be followed in sample collection and in transportation.
- Efforts should be made to avoid highly toxic and over use of

## Wheat Planning Workshop Held

A two-day workshop on Wheat Planning was organized jointly by NARC and CIMMYT/Nepal on 30 November to 1 December 2000.

The workshop Chaired by Mr. Dhruva Joshy, Executive Director was participated by NARC scientists and representatives from CIMMYT, Hill Agriculture Research Project (HARP), World Bank, National Trading Co., Institute of Agriculture and Animal Science (IAAS), Department of Agriculture (DOA), Department of Irrigation (DOI), Seed Sector Support Project (SSSP) and LI-BIRD.

In the Workshop, brief summary of present status and future direction directions for wheat presented from Wheat Research Program, Agriculture Botany, Plant Pathology, Agronomy, Soil Science, Agriculture Engineering, Entomology, Outreach and Post-harvest Divisions of NARC. Roles and wheat research and development perspectives of DOA, IAAS, HARP, CIMMYT, and of NGOs were presented from respective organizations.

The Workshop concluded with presentation after discussions on future strategy, linkages, locations, manpower and other issues in groups divided by disciplines and then by locations.

pesticides. Pesticides should be used judiciously strictly on a need basis.

### An overview

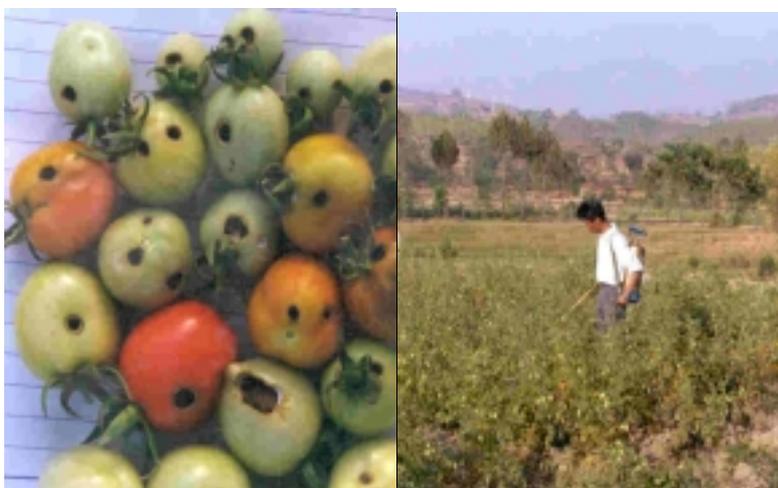
This type of study will determine the amount of pesticide residue on marketable vegetables and other foodstuff. This will help at least to draw a borderline for deciding whether the foodstuff is fit for consumption or not. Most importantly this will have an immediate effect on great number of consumers, particularly on their health aspect. Besides, this will also have positive impact on improving the present day environment that is being polluted by the pesticides.

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# Vegetables and Pesticides - the Virtual Paradox

- Dhruva N. Manandhar

In recent years, vegetables are being considered as one of the major constituent in daily dietary menu of average Nepalese people. Most Nepalese people these days consume good amount of vegetables possibly in both meals and if not at least in one meal as a supplement of nutrition particularly vitamins and minerals. Thus the demand of vegetables is increasing every year. Vegetables particularly off-season vegetables are getting popular among mid-hill farmers as a high priority and high value crop mainly to generate employment and to increase the income of a rural people. However the produce need to be safe because it is consumed by people of all age. The produce could be contaminated with pesticides knowingly or unknowingly by farmers either during growing period or during storage.



## Hidden scenario

The priority on vegetable farming given by the government, NGOs, INGOs and donors with the purpose to improve the quality of life of resource poor farming communities is certainly a positive step at the national perspective. But at other hand, because of the increased demand of vegetables with good market outlets and better price, farmers have been using pesticides in these vegetables indiscriminately at higher doses with frequent and cocktail spray to protect the increasing incidence of insects, pests and diseases. Thus there is enough reason to assume the fact that there might be certain level of pesticide residue on the produce the farmers harvest at close

frequency. Farmers hardly care for waiting period as prescribed for each pesticide.

## The dilemma

The national consumption of pesticide is about 56m tons of a.i. formulation annually. Of the total amount, vegetable crops certainly consume high rate of pesticides as compared to cereal crops. However the record

worse situation, death to the human. The produce might contain different levels of pesticide residue however, it should not exceed the maximum residue limit (MRL) for consumption purposes. There is an international code of conduct for MRL on foodstuff. However each country could set their own standard for MRL showing the government's great concerns on the public health. Obviously in Nepal, very little work has been done to document

the level of pesticide residue on marketable vegetables. It is interesting to note that most farmers for their home consumption purposes grow vegetables in a separate plot wherein they virtually use none or only limited amount of pesticides. It is learnt that the brinjal or eggplants are dipped in insecticide solution to give it an extra shiny appearance.

of total amount of pesticides used in vegetables alone is not available. Most people quite frequently might have been consuming vegetables with certain level of pesticide residue. This might cause ill effect on human health depending upon type and amount of pesticide used. At the same time, pesticides as applied in the field will have indirect impact on the deterioration of the environment such as invisible effect on wildlife, pollution of surface and ground water and of course pollution of the soil and air.

## The reality

It is quite clear that almost all pesticides can cause illness and to the

## Proposed strategy

- It is high time for immediate initiation by the concerned authorities/ organizations for the study on level of pesticide residue on vegetables and also on other foodstuff. It is in fact most tedious, pain taking and skillful task. However it need to be focussed initially at potential pocket areas where higher amount of pesticides are used.
- Proper attention need to be given for benefit-risk ratio which though may vary depending upon the perception of different socio-economic groups.
- This type of study requires multi-disciplinary team with field-based

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## SHORT NEWS

### ICT Expert Consultation Meeting

Expert consultation meeting on Information Communication Technologies (ICT) was held at Chiang Rai, Thailand on 6-7, November, 2000.

Mr. B. M. S. Basnet, Chief, Communication, Publication and Documentation Division of NARC participated the meeting.

### NARI and NASRI Strategic Meetings

Strategic meetings of the National Agriculture Research Institute (NARI) and National Animal Science Research Institute (NASRI) of the NARC were held separately at Khumaltar and Godavari on 21 December 2000. The meetings were held to make strategy for proper functioning of the Institutes.

### Interaction on Pesticides

National level interaction program on "What can be done in Pesticide Problems: Minimization or Alternatives?" was held on 12 December 2000 in Kathmandu.

The one-day program organized by Society of Environment Journalists-Nepal (SEJ-Nepal) was participated by representatives and experts from Governmental concerned sectors GOs, NGOs and INGOs, pesticides importer/dealer, consumers and media people. Senior Scientists: Mr. B. M. S. Basnet and Dr. K. K. Sherchand participated to the interaction program.

### NASA Conference held

The National Conference of Nepal Animal Science Association (NASA) was held at Lalitpur on November 29.

The three-day Conference held with the view to discuss ways to promote livestock and fishery in the country was inaugurated by the Hon'ble Vice-Chairman of National Planning Commission, Mr. Prithvi Raj Ligal in a special session Chaired by NASA President, Dalaram Pradhan.

### Training on Field Experimentation Held

A two-day training Seminar on "The Art of Practical Field Experimentation" was held at Agriculture Research Station, Lumle on 23-24 November, 2000. The Seminar was participated by 20 researchers/scientists from different research stations and disciplinary divisions.

### Maize Steering Committee Meeting Held

Maize steering Committee meeting was held at Soil Science Division, NARC, Khumaltar. in December.

In the meeting attended by representatives from NARC, CIMMYT and SDC, reports on maize research activities were presented and discussed.

### Mahindra Tractor Krishi Mela Held

An Agriculture Fair and Exhibition sponsored by Mahindra Tractor Co. was held at Inaruwa, Sunsary from 14 – 21 October 2000. The Mela was inaugurated by Hon'ble State Minister for Agriculture and Cooperatives, Mr. Bal Deo Sharma Majgaiya. NARC actively participated in the Exhibition.

### Dr. Panjab Singh Visited NARC

Dr. Panjab Singh, Director of Indian Agriculture Research Institute (IARI) visited NARC on 14 October 2000. During the visit he held talks with NARC officials on mutual cooperation in agriculture research and had interactions with the scientists on exchange of experiences.

### British Farmers Visit NARC

A team of British farmers visited NARC, Khumaltar on 10 November and Agriculture Research Station, Lumle on 14 November 2000. The team of 16 British farmers on a half-day long visit to NARC, Khumaltar observed various research activities on crops and livestock.

### Farmers & Students Visit NARC

A farmers' group of 30 from Rasuwa District visited NARC on 1 December 2000 .

A group of 30 high school students visited NARC on 22 November, 2000.

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27. Mr. Ram Chandra Ghimire	T-6/Horticulture	Seed Plot Technology in Potato	15-21 December	India
28. Mr. Pradeep Kumar Karki	T-6/Horticulture	Seed Plot Technology in Potato	15-21 December	India
29. Mr. Ram Narayan Chaudhary	S-3/Pathology	Breeding Technology on Rapeseed Mustard	15-31 December	India
30. Mr. Tara Bdr. Ghimire	S-3/Agronomy	Breeding Technology on Rapeseed Mustard	15-31 December	India
31. Dr. Hari Pd. Bimb	S-3/Pathology	Genetic Diversity Analysis	18Dec.-17 March	Japan
32. Mr. Govinda Pd Acharya		Laboratory Analytical Techniques	15 Dec.-15 March	UK

### STUDY

33. Mr. Ram Lal Shrestha	T-6/Horticulture	M.Sc. in Horticulture	31Oct.-30Oct.,2002	Philippines
34. Mr. Yamuna Prasad Sah	T-6/Entomology	M.Sc. in Entomology	31 Oct.-30Oct.2002	Philippines
35. Mr. Suresh K. Wagle	S-3/Fishery	M.Sc.in Fisheries	9 Nov.-8Nov.2002	Thailand
36. Mr. Surendra Prasad	T-6/Fishery	M.Sc.in Fisheries	9 Nov.-8Nov.2002	Thailand
37. Mr. Arjun B. Thapa	T-6/Fishery	M.Sc.in Fisheries	9 Nov.-8Nov.2002	Thailand

# TRAINING WORKSHOP/SEMINARS, STUDY & TOURS ABROAD

(October - December 2000)

S.N.	Name	Position/Faculty	Subject	Duration	Country
<b><u>SEMINAR/WORKSHOP</u></b>					
1.	Mr. Dil Bdr. Gurung	S-3/Pathology	Training Course Workshop for Participatory Rural Assessment	2-6 October	Philippines
2.	Mr. Ragunath Prasad Sapkota	S-5/Agronomy	The Fifth SANPGRI meeting	9-11 October	India
3.	Mr. Bhola Man Singh Basnet	S-4/Chief, CPDD	The First ICT Expert Consultation Meeting	6-7 November	Thailand
4.	Mr. Ram Bdr. Maskey	S-3/Soil	Fifth Assembly of the Management of Soil Erosion Consortium (MSEC)	6-11 November	Indonesia
5.	Mr. Dhruva Joshy	Executive Director	The Sixth General Assembly of APAARI	8-10 November	Thailand
6.	Dr. Nanda Prasad Shrestha	Director/Livestock	Fifth Global Conference on Conservation of Domestic Animal Genetic Resources	20-24 November	Brazil
7.	Dr. Surya Laxmi Maskey	S-4/Soil	Nitrogen Fixation Workshop	3-7 December	Australia
8.	Mr. Ram Prasad Upreti	S-4/Pathology	Project Design Workshop on Neglected and Underutilized species	19-21 December	India
9.	Mr. Prem Chandra Pd. Chaurasia	S-4/Pathology	Integrated Management of Crop Diseases	30 December	India
<b><u>OBSERVATION TOUR</u></b>					
10.	Mr. Dular Chan .S. Pathik	Director/Crop&Hort	Bed Planting of Rice Observation	10-12 October	India
11.	Mr. Shambhu Pd. Khatiwada	S-3/Agronomy	Bed Planting of Rice Observation	10-12 October	India
12.	Mr. Ananda Kumar Gautam	S-3/Agronomy	Bed Planting of Rice Observation	10-12 October	India
13.	Mr. Ambika Charan Shrivastav	S-3/Agronomy	Bed Planting of Rice Observation	10-12 October	India
14.	Mr. Janmejaya Tripathi	S-3/Agronomy	Bed Planting of Rice Observation	10-12 October	India
15.	Mr. Ganesh Sah	S-3/Engineering	Bed Planting of Rice Observation	10-12 October	India
16.	Dr. Bhola Ram Pradhan	Director/Planning	Observation tour to Kyoto University	13-29 October	Japan
17.	Mr. Shambhu Bdr. Pandey	Rg. Director/Nepalgunj	Observation of some Indian Agriculture Research Institutions	26 Nov.-8 Dec.	India
18.	Mr. Vijaya Kumar Dutta	S-3/Agronomy	Observation of some Indian Agriculture Research Institutions	26 Nov.-8 Dec.	India
17.	Mr. Nhuchhe Lal Tamrakar	S-3/Livestock	Observation of some Indian Agriculture Research Institutions	26 Nov.-8 Dec.	India
18.	Mr. Bal Bahadur Baniya	T-6/Agronomy	Observation of some Indian Agriculture Research Institutions	26 Nov.-8 Dec.	India
17.	Mr. Daya Nidhi Pokharel	T-6/Agronomy	Observation of some Indian Agriculture Research Institutions	26 Nov.-8 Dec.	India
18.	Mr. Purushottam Jha	T-6/Pathology	Observation of some Indian Agriculture Research Institutions	26 Nov.-8 Dec.	India
19.	Dr. Surya Laxmi Maskey	S-4/Soil	Observation Tour	3-7 December	Australia
20.	Ms. Santi Bhattarai	S-3/Soil	Observation Tour	3-7 December	Australia
21.	Mr. Purushottam Lal Joshy	S-3/Fishery	Observation in fish	16-27 December	India
22.	Mr. Gopal Pradhan	S-3/Engineering	Observation in fish	16-27 December	India
<b><u>TRAINING</u></b>					
23.	Mr. Kamal Sah	S-3/Soil	Graduate Course in Remote Sensing and Geographic Information System	1 Oct.-30 Jun. 2001	India
24.	Mr. Samid Ahmad	S-1/Horticulture	Regional Training Course on Strengthening National Capacity to Manage Information on Tropical Fruits Genetic Resources	9-21 October	Philippines
25.	Dr. Samudra Lal Joshy	S-4/Entomology	Mass Production of Bio Agent	1-27 December	India
26.	Dr. Chandra Laxmi Shrestha	S-3/Pathology	Mushroom Production and Processing Technology	14-21 December	India

*Contd. on page 6*

## "Exchange of Knowledge and Experience is Vital in Agriculture Research"

- S. B. Pandey

Agricultural research is a continuous process that passed through the development of human civilization. The complexities in the feeding of world's ever growing population on one hand and environmental concern on the other have urged the need of agriculture research ever more increasingly. The need of local, national, regional and global efforts have highly realized.

Agricultural research is simply a systematic effort to develop new methods (Technologies) to increase agricultural productivity. Agricultural research needs in a particular country may be determined by the unique characteristics of soils, climates and other conditions that may be similar or different in regions or countries. A large amount of the research cost may be reduced by the transfer of successful technologies from one country or region to other having similar agro-ecological character. Sharing of knowledge and experiences is a basic in research and development.

With the view to exchange the technical know-how, and enhance link and coordination among the scientists, a team of agriculture scientists/researchers from Regional Agricultural Research Station, Nepalgunj had a two-week visit program to some agricultural research related institutions in UP, India that are very close to Mid and Far-Western Development Regions of Nepal.

The institutions visited by the team during November 26-December 8, 2000 are: Chandra Sekhar Azad University of Agriculture and Technology, Kanpur; Indian Institute of Pulse Research,

Kanpur; Narendra Dev University of Agriculture and Technology, Faizabad; Govinda Ballav Pant University of Agriculture and Technology, Pantnagar; and Central Institute of Medicinal and Aromatic Plants, Pantnagar.

The seven-member team consisting of S.B. Pandey, Regional Director; V.K. Dutta, Senior Scientist (Agronomy); N.L. Tamrakar, Senior Scientist (Livestock); B.B. Baniya, Technical Officer (Grain Legumes); P.Jha, Technical Officer (Plant Pathology); D.N. Pokhrel Technical Officer (Horticulture) had a very intensive observation of the research activities and research management under the institutions and had interactions with the scientists in the respective institutions.

The Indian agriculture research and the technologies can give new ideas to we Nepalese researchers in agriculture technology generation and improving

research management. Moreover, the technologies generated in the Indian institutions may be of great value in the Nepalese agriculture as there are similarities in agro-ecological and socio-economic characters. The developed and identified important new varieties/breeds and technological practices in the institutions have been found to be potentially adoptable under the Nepalese conditions, particularly in the mid and far western terai regions. Some modification to the technologies may be suggested after testing under our conditions. The important technologies from each of the institutions have been recorded by the team and a booklet published from RARS, Nepalgunj.

I think the visit, the first of its kind, is a very important event in particular to increase relation with the scientist and share technical knowledge and experiences in agricultural research



*Nepalese team observing Pulses research trial*

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