

International Maize and Wheat Improvement Center

Hill Maize Research Project Phase IV (HMRP IV)

*“Improved Seed for the Rural Poor in the Hills of Nepal:
Fostering Adoption of Improved Maize Technologies to Promote Food
Security, Nutrition, and Economic Growth”*

Yearly Plan of Operation 2011

Submitted to:

The Swiss Agency for Development and Cooperation (SDC)

And

**The United States Agency for International Development (USAID)
Kathmandu, Nepal**

March 2011



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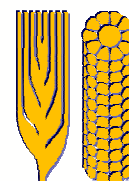
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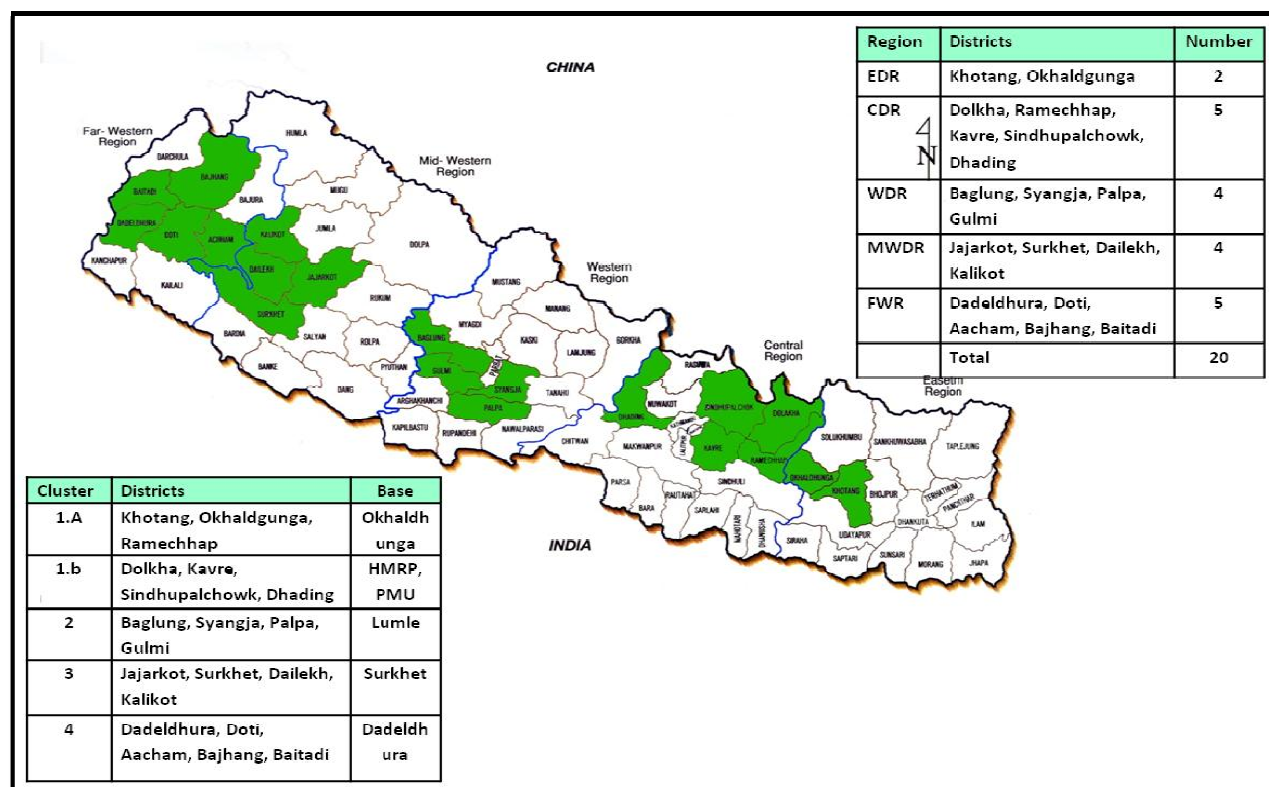
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HMRP-IV Project Districts and Clusters



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ABBREVIATIONS

ABTRACO	Agro-Business Trade Promotion Multipurpose Cooperative Ltd
ARS	Agriculture Research Station
BCTN	Bahun, Chhetri, Thakuri and Newar
BOG	Basic Operating Guidelines
CAERD	Centre for Agriculture and Environmental Research and Development
CBO	Community-Based Organization
CBSP	Community-based Seed Production
CDD	Crop Development Directorate
Ce-CRED	Centre for Community Resource and Environment Development
CFFT	Coordinated Farmers' Field Trial
CIMMYT	International Maize and Wheat Improvement Centre
CPDD	Communication Publication and Documentation Division
CSP	Community Seed Promoters
DADO	District Agriculture Development Office
DAGs	Disadvantaged Groups
DISSPRO	District Seed Self-sufficiency Programme
DIWO	Development Initiative Welfare Organisation
DoA	Department of Agriculture
DOS	Downtrodden Oppressed Society
FAT/IRD	Farmer Acceptance Test/Informal Research and Development
FORWARD	Forum for Rural Welfare and Agricultural Reform for Development
GESI	Gender, Equity and Social Inclusion
GLS	Gray Leaf Spot
GoN	Government of Nepal
HHs	Households
HMRP	Hill Maize Research Project
I/NGO	International Non-Governmental Organization
IPNS	Integrated Plant Nutrient System
KDF	Khotang Development Forum
LIBIRD	Local Initiatives for Biodiversity, Research and Development
MoAC	Ministry of Agriculture and Cooperative
NARC	Nepal Agricultural Research Council
NMRP	National Maize Research Programme
NSB	National Seed Board
OMS	Outcome Monitoring Summary
OPV	Open Pollinated Variety
PVS	Participatory Varietal Selection
QPM	Quality Protein Maize
RARS	Regional Agriculture Research Station
RAS	Rapti Agriculture-graduate Society
RSTL	Regional Seed Testing Laboratory
SAHAS	Groups of Helping Hands
SDC	Swiss Agency for Development and Cooperation
SRF	Seed Revolving Fund
SGP-C	Small Grants Project-Committee
SQCC	Seed Quality Control Centre
SSMP	Sustainable Soil Management Project
TC/SC	Technical Committee/Steering Committee
TTRI	Technical Training and Research Institute
USAID	United States Agency for International Development
VDC	Village Development Committee
VSP	Vegetable Seed Project
YPO	Yearly Plan of Operation

1. EXECUTIVE SUMMARY

1. The Hill Maize Research Project (HMRP), initially funded by the Swiss Agency for Development and Cooperation (SDC), began in 1999 with the objective to increase the food security of farm families in the hills by raising the production, productivity and sustainability of maize-based cropping systems. The current phase (HMRP IV, Aug 2010 to July 2014) is co-funded by SDC and the United States Agency for International Development (USAID). In the last three phases, HMRP-CIMMYT, in collaboration with NARC, NMARP, DoA, NSB, NGOs and CBOs, contributed to improve food security and livelihoods of the rural hill farmers through the development and release of new and high yielding maize varieties, seed multiplication of farmers-selected varieties, and through the validation and dissemination of key resource conserving technologies for maize based cropping systems. Until 2010, seven new maize varieties have been released by the NSB, about 830 t of improved maize seed was produced by more than 174 CBSP groups, and at least 10 crop management technologies were validated and disseminated. In the policy ambit, the HMRP has worked closely with the NSB and other stakeholders to improve seed policy and to institutionalize participatory technology development within the NARC and DoA systems, including capacity development. As a result of targeted participatory approaches, the technology innovations of the HMRP during 2010 have been widely adopted by 21,252 households in the hills of which nearly 70 % were disadvantaged groups (DAGs).

2. The goal and focus of the HMRP IV is to improve food security and income of poor and DAGs in the hill of Nepal by up-scaling and consolidating past project achievements, maximizing impacts by selective intensification of key project activities, and by building on the collective actions, infrastructures and networks of DoA, NARC, and other stakeholders. The two outcomes of HMRP IV are- (i) Hill maize farmers, especially from poor and disadvantaged groups, adopt new and profitable maize varieties and improved technologies and (ii) National Seed Board (NSB), NARC and DoA enforce quality control through both public and private institutions. To meet up with the first outcome, the HMRP in 2011 has planned to work with more than 40,000 HHs (with 70% DAGs) covering about 250 VDCs from 20 remote hills districts. Similarly, seed production and marketing will be emphasized through at least 250 CBSP groups (60% women) which aim to produce and market at least 1000 t of farmers' preferred maize varieties. To accomplish the second outcome, HMRP in 2011 will continue to advocate for relaxed seed quality control procedures, including authorization for truthful labeling in the source seed production process. The ultimate objective will be to identify and implement a seed policy and regulatory framework that allows a sustainable and efficient seed systems in the hills of Nepal.

3. Lessons learnt during previous phases were valuable to plan projects and activities for 2011. Such lessons included- (i) ensuring participation of women farmers from DAGs is a key to improve their food security (ii) institutionalization of project's achievements and learning in NARC and DoA systems; continuing small infrastructures support to CBSP, seed revolving fund and attracting private sectors in seed business are crucial for sustainability (iii) collective and coordinated actions of government, non- government and private sector actors are essential to increase impacts (iv) implementation of decentralized source seed production can ensure the availability of breeder and foundation seed to CBSP groups (v) NARC should focus on variety development, maintenance and breeder seed production (private sectors are weak to take these responsibilities) where as foundation seed production be easily transferred to the private sector.

4. The YPO- 2011 has focused on GESI as an integral component in all the activities; significant efforts are being made to institutionalize the PVS, IRDs and CBSP approaches in the DoA and NARC systems; more NGOs and private sector partners have joined the project; a decentralized approach for source seed production through NARC research stations, private seed companies and CBSP groups was included in the YPO- 2011. The operational budget for partners has been approximately tripled this year. Total budget for outcomes A and B is US\$ 1,095,322.0 (NRs. 78,863,170.0) which comprises SGP fund, seed purchase for IRDs and PVS trials, and purchase of vehicles, small infrastructure and equipments for partners.

Outcomes Monitoring Summary of 2011

Indicators	Baseline ¹	Phase target	Situation	Comment
A. Hill maize farmers, especially from poor and disadvantaged groups, adopt new and profitable maize varieties and improved technologies to enhance productivity and marketing opportunities				
1. NMRP and CBSP meets 30 % of national OPV maize seed demand of 5,086 tons	830 t	1,000 t targeted for 2011 by at least 200 CBSP groups	On track.	
2. 35,000 DAG HHs used new maize varieties and improved technologies	21,252 HHs	35,000 HHs (60 % women and 70 % DAGs) used new maize varieties and improved technology	On track. 35,000 HHs to be targeted in 2011	
3. CBSP/Cooperatives involved in commercial seed production and marketing (Seed Value Chain)	10	200 CBSP groups (with 50% women and 50% DAGs representation) engaged in seed multiplication and at least 40 of them developed commercial seed business	On track.	Significant progress is expected in 2011
4. Beneficiaries use Quality Protein Maize (QPM)	1,500	11,000 HHs use Quality Protein Maize (QPM)	On track. 5,000 HHs targeted for 2011	
5. Women and DAGs represented in CBSPs and in participatory research and extension activities	50 % women and 70 % DAG in total	50% women and 50% DAGs represented in CBSPs and 60 % women and 70 % DAGs participated in other research and development activities	On track. Orientation/ training course, covering issues on GESI, organized for more than 70 partners in early 2011	
B. National Seed Board (NSB), NARC and DoA enforce quality control through both public and private institutions				
B.1. NARC/NSB issued directives and procedures for decentralized truthfully labeled source seed production	0	Directives and procedures for decentralized truthfully labeled source seed production issued	On track. New Seed regulation has been submitted for approval	National seed policies and visions need revision

¹ Base line data indicates situation until 2010 (extracted from OMS 2010)

Indicators	Baseline ¹	Phase target	Situation	Comment
B.2. Public and private sector experts obtain seed quality control mandate	0	200 NARC breeders, DADOs SMS and Private sector experts (at least 50 women and 10 from private sector) authorized for field inspection, sampling and seed testing	On track. Orientation course to relevant partners planned in 2011.	
B.3. Sufficient quantity of Breeder and Foundation seed production by NARC	17.5	80 tons Breeder and Foundation seed produced	On track. A seed production plan was developed in consultation with relevant partners	
B.4. Four maize varieties, including one QPM, developed and released	7	4 varieties, including one QPM released	On track. Four pipeline OPVs, including one yellow QPM in process of release	Pipeline OPVs under extensive seed multiplication

2. BASIC INFORMATION

3.1 Project Background

5. The Hill Maize Research Project (HMRP), initially funded by the Swiss Agency for Development and Cooperation (SDC), began in 1999 with the objective to increase the food security of farm families in the hills by raising the production, productivity and sustainability of maize-based cropping systems. The HMRP has gone through an initial period of four years (Phase I, 1999 to 2002), with the aim to develop, identify and validate maize varieties and technologies for the benefit of poor farmers in the hills of Nepal. Its primary focus was on basic research. Phase II of the project went from 2003 to 2007 where the project balanced applied and adaptive research, multiplied seed of varieties selected by farmers in PVS, through CBSP, and coordinated diverse small-grants projects that contributed to HMRP goals. In the third Phase III (January 2008 - July 2010), the project placed emphasis in the validation and dissemination of the improved maize varieties and agronomic/soil interventions, consolidated the participatory approaches for technology adoption, strengthened the partnership with different local stakeholders, emphasized gender equity and social inclusion (GESI), and expanded to other geographical areas in the hills. The current phase (HMRP IV, Aug 2010 to July 2014) is co-funded by SDC and USAID. The goal of the HMRP IV is to improve food security and income of poor and DAGs in the hill of Nepal by up-scaling and consolidating project achievements of the past three phases (1999-2010), maximizing impacts by selective intensification of key project activities following geographical clustering approach, focusing on dissemination, community based seed production and marketing and, continuing policy advocacy for truthful labeling, decentralized source seed production and public- private partnership in seed quality control.

3.2 Analysis of socio- political contexts

6. A massive transformation in both, social and political ambits, are taking place in Nepal since the ending of conflicts in 2006. However, the transition period has become tough and the country's law and order situation has not been stabilized yet. Political tensions

and consequent power-sharing battles among the political parties are continuing. The main political agendas of writing the constitution and ending the peace process conclusively are yet to be achieved making the future political scenario unpredictable. Whatever be the socio-political contexts, the HMRP will continue strictly adhering to the BOGs and follow the “do-no-harm” principle while implementing project activities.

7. Food insecurities, including the situation of social safety nets, remained weak in the country, particularly in the remote hilly areas of Nepal where HMRP will be working. Out of 75 districts of Nepal 43 are food deficit and are located in the mountain and hill region. The GoN has endorsed the development framework for the three Years Interim Plan (TYIP-FY2010/11– FY2012/13), which foresees a sustainable economic growth with an average growth rate of GDP at 5.5 percent. To achieve this target, the role of HMRP will be very important. Climate change and climate variability is emerging as a main threat for a sustainable food security situation in the country. This shows the importance of HMRP to work on climate responsive varietal development and dissemination to meet the farmer’s requirement.

3.3 Partners and the budget for 2011

8. Ten research stations/ divisions of NARC (32 SGPs), 20 DADOs of DoA (1 mega project) and 23 NGOs, CBOs and private organizations (27 SGPs) (**Annex 4**) will implement 60 SGPs including one mega project coordinated by DoA/CDD. Approximately 40,000 households and 250 CBSP groups from 20 hill districts will be participating in the project in 2011 (**Annex 4**). A total of US\$ 1,095,322.0 has been allocated in outcomes A and B to implement project activities in 2011. Detail of Breakdown of the budget is presented in **Table 1**.

Table 1: Detail of budget allocated for Outcome A and Outcome B

Program	Amount (US\$)	Amount (NRs)	Percentage
Budget for 60 SGPs	718,068	51,700,882	65.6%
Budget for 34,000 IRD sets and 600 PVS sets	61,000	4,392,000	5.6%
Purchase of 2 vehicles and 10 motorbikes for partners	61,000	4,392,000	5.6%
Central budget to support Outcome A and Outcome B	255,254	18,378,288	23.3%
Total	1,095,322	78,863,170	100.0%

9. A total of US\$ 718,068.0 will be provided to the partners on installment basis to implement small grant projects. Similarly, US\$ 61,000.0 will be used to purchase and preparation of 34,000 IRDs and 600 PVS trial sets; and US\$ 61,000.0 to purchase two vehicles and ten motorbikes for DoA and NARC. A total of US\$ 255,254.0 will be managed centrally to support partners' activities under Outcome A and B which includes organization of training courses, monitoring, awarding partners and CBSP groups, creation of seed revolving fund within CBSP, infrastructure and small equipment support to partners, CBSP, etc. Summary budget of partners is presented in **Annex 4** and detail budget of Partners-NARC is in **Annex 6** and CDD/DOA is in **Annex 7**. District coverage by partners is presented in **Annex 5**.

3. EXPECTED OUTCOMES

10. The goal of HMRP IV is to improve the food security and income of the rural HHs in the hills especially of the poor and DAGs. The HMRP IV has prioritized two outcomes targeted to program and seed policy aspects. The first outcome is related to increase the

adoption of new and profitable maize varieties and improved technologies for enhanced productivity and marketing opportunities. Access and availability of the improved maize seed of farmer preferred varieties to the poor and DAGs plays a vital role to increase the adoption of new varieties and technologies. Therefore the second outcome is to advocate for relaxed seed quality control procedures, including authorization for truthful labeling in the source seed for sustainable and efficient seed systems in the hills of Nepal. In this way both outcomes complement each other to achieve the project goal.

11. Concentrated, enduring and continued efforts for communication of innovations are essential to improve food security of poor and DAGs in the remote hill areas. The HMRP in 2011 has planned to work with more than 40,000 HHs (with 70 % DAGs) covering about 250 VDCs from 20 remote hills districts. At least 39,510 IRD sets and 600 PVS sets, 600 intercropping trials and several other participatory technology validation and dissemination will be conducted in 2011. Similarly, seed production and marketing is emphasized through at least 250 CBSP groups (60 % of the members will be women) which aim to produce and market about 1,000 t of farmers' preferred maize varieties. Training to the farmers is an integral part for all the activities. About 7,000 HH members (with 70 % DAGs) will be trained on improved maize production technologies including maize- vegetable intercropping, seed production, seed quality control and truthful labeling, seed marketing, group dynamics and GESI considerations. The maize seed produced by CBSP and NARC in 2011 will be sufficient to meet the maize seed demand of 70,000 ha in the hills of Nepal. GESI will be further emphasized to increase the participation of women and DAGs in CBSP and participatory research and extension activities. Maize breeding activities are targeted to develop varieties that are drought and low nitrogen tolerant including development of QPM varieties.

12. To accomplish the second outcome, HMRP in 2011 will continue to advocate for relaxed seed quality control procedures, including authorization for truthful labeling in the source seed. The ultimate objective will be to identify and implement a seed policy and regulatory framework that allows a sustainable and efficient seed systems in the hills of Nepal. HMRP will support NSB/ SQCC to draft the "Seed Vision 2020" strategy and continue support for the execution of seed act, regulation, policies and visions. HMRP expects that the amended seed regulation of Nepal will be approved during 2011, and this will permit private partners, NARC key scientists and DoA selected development workers to get license to carry out seed field inspection, seed testing, sampling and truthful labeling. In year 2011, HMRP in collaboration with NSB/ SQCC, CDD and NARC, will conduct a training course for at least 50 prospective NARC breeders, DoA agriculturists and private sector experts to prepare them for obtaining seed quality control license. CBSP- RSTL linkages will be strengthened to allow CBSP groups to receive increased quality services from the respective RSTLs. Seed processing, packaging, branding and truthful labeling will be implemented through prospective CBSP groups. ARS, Surkhet will be strengthened and source seed production has been decentralized. CBSP groups and ARS research stations throughout the country will participate in producing BS and FS which will significantly help farmers to get source seed from their nearby research stations and CBSP groups. Measures are taken to maintain the sustainability of the interventions. The process to integrate DISSPRO and CBSP has been initiated in a high priority basis. Similarly, capacity of DADOs and NARC research stations, and their linkages with the farmers groups, will be strengthened in 2011. Small infrastructure support to CBSP and increased economic efficiency through value chain approach will significantly help CBSPs to sustain their seed production in the long-run. At

least 20 CSPs will be trained in one of the ARS who will work in their respective community to disseminate improved maize varieties and technologies. Environmental sustainability has received high priority through the development and dissemination of improved OPVs, and resource conserving technologies for the hills.

4. EXPECTED OUTPUTS

Goal: Farm HHs in the hills of Nepal, especially of poor and disadvantaged groups, have improved food security and income

Outcome A: Hill maize farmers, especially from poor and DAGs, adopt new and profitable maize varieties and improved technologies to enhance productivity and marketing opportunities

Outcome B: National Seed Board (NSB), NARC and DoA, enforce seed quality control through both public and private institutions

Outputs under Outcome A

13. There are four outputs under outcome A. Activities under each output are briefly described in the following section.

A.1. CBSP Groups know and use available improved maize varieties and technologies

14. The YPO 2011 targets seed multiplication of farmers' preferred improved maize varieties and technology dissemination to about 250 CBSP groups through 10 research stations/ divisions of NARC, 20 DADOs of DoA and 23 NGOs, CBOs and private organizations (**Annex 4**). Special efforts are laid in YPO in making CBSP groups gender and DAGs inclusive, where the project is targeting to increase the participation of women in seed production and marketing activities to 60%. Twenty Community Seed Producers (CSPs) will be trained to facilitate and serve local communities. They will be as Para- technicians in their villages. Some of the CBSP groups developed by HMRP III will be involved to produce foundation seed. This is one of the major shift in the seed system of Nepal where traditionally DoA and NARC were involved in source seed production. The number of IRDs and PVS trails has increased significantly to 39,510 and 600 respectively to continue providing varietal options to the CBSP groups from where they can select the best varieties suitable to their condition and to respond properly to the market demand. CBSP groups will be encouraged to adopt crop management technologies such as maize-vegetable, maize-legume intercropping, composting technologies and plant population management at the optimum level. Each of the CBSP members will be receiving training on the various aspects of seed system including seed production, seed quality control and truthful labeling, seed marketing, group dynamics and GESI considerations. Such training will be organized during different stages of crop development including pre- sowing, crop growth and post- harvest. The executives of the CBSP groups will be trained on seed value chain, preparation of business development plan and plan execution. All these activities will ensure that the CBSP groups know and use improved maize varieties and technologies on a sustainable manner.

A.2. Poor and disadvantaged HHs have increased access to quality maize seed and proven technologies

15. HMRP innovations on maize varieties and crop management technologies developed through a targeted participatory approach have been very effective for poor and DAGs to

increase their agricultural production. Bringing these innovations, especially to the poor and DAGs, are emphasized. About 70% of the targeted 40,000 HHs will be from DAGs. About 34,000 sets of IRDs, including QPM (1 kg each), will be targeted mainly to resource poor and DAG farmers. It means that these farmers will be able to produce sufficient seed to cover their fields for the subsequent year. Partners will conduct on- farm training to these farmers in production technologies and seed selection methods. Many of those poor and DAGs will be receiving about 8,000 baby sets (500 gm) and provide feedback to the researchers. Overall, YPO- 2011 has created enough bases to make sure that at least 25,000 DAG HHs increase their access to quality maize seed and technologies.

A.3. CBSP Groups/Cooperatives supply quality seeds at competitive market price

16. YPO-2011 foresees to form 250 CBSP groups and seed production in about 1,100 ha. It is also expected that 1,000 t of improved maize seed will be marketed by these CBSP groups. Some of the prospective CBSP groups trained in HMRP III will be producing about 15 t of foundation seed. For the first time since its initiation, HMRP has been applying seed value chain approach in the seed production and marketing. It is expected that at least 40 CBSP groups will engage in the marketing chain as a strong actor. Input suppliers, seed producers, processors, traders and seed consumers will engage in seed business in such a way that each of the actor will be informed of the cost and margins that will allow seed producers to fetch fair price for their seed. This approach will eventually help to maintain seed price at a reasonable rate. CBSP groups will be encouraged to clean, process, package and market the seed with truthful labeling. Small equipments and infrastructure supports will continue in an organized way. YPO has allocated budget for seed revolving fund maximum of NRs. 1,000,000 per CBSP group. At least 10 promising CBSP groups will receive this fund for utilization in seed purchase in 2011.

A.4. Poor and disadvantaged maize producing HHs has access to multiple agricultural interventions for enhanced productivity

17. A strong and effective collaboration will be developed among the projects (especially projects funded by SDC and USAID in the HMRP district) that has complementary goals. The project will collaborate through the exchange of results and information, and through joint dissemination and training activities with a range of other projects, including VSP, SSMP, LILI etc. YPO targets to initiate complimentary activities with agricultural projects funded by SDC in Ramechhap, Okhaldhunga and Khotang for 2011, and based on the learning of such collaboration, it will be extended to other HMRP districts as well. With this initiation, at least 1,000 HHs increase cropping intensity in the SDC cluster districts, 300 farmers practice maize and vegetables seed production jointly with the VSP and QPM varieties will be popularized in collaboration with Home Garden projects.

Outputs under Outcome B

18. There are four outputs under outcome B. Activities under each output are briefly described in the following section.

B.1 National Seed Board (NSB), NARC, DoA allow decentralized source seed production system:

19. Supply of the source seed of the farmers preferred varieties during appropriate time and quantity is a major problem for CBSP and DISSPRO in the country. NMRP is coordinating breeder and foundation seed production of maize in Rampur and other stations.

However, source seed produced by hill stations of NARC are not able to meet regional demand for the source seed. To address these constraints NARC, DoA and NSB/ SQCC, HMRP in 2011 has planned to expand areas for breeder and foundation seed production in each of the NARC research station including NMRP, Pakhribas, ABD, Lumle, Kabre, Surkhet and Doti. In addition to this, NARC and other partners will produce foundation seed production through some of the successful CBSP groups. In 2011, NMRP and other hills stations will produce at least 40 t of breeder and foundation seed, and CBSPs groups will produce about 15 t of foundation seed. NMRP including regional stations will be involved in the maintenance and improvement of maize varieties developed and released during previous phases of the HMRP.

B.2 Public and private institutions obtain seed inspection mandate and license

20. Seed quality should be a prime concern in any seed systems. Seed Act (2045 BS) has provisioned three systems of seed quality control namely, seed certification (SC), truthful labeling (TL) and Quality Declared Seed (QDS). SC and QDS are voluntary while TL is compulsory by law. But most of the seeds produced by farmers are sold without any kind of seed quality assurance system. In HMRP, some of the groups are using TL system which is found very promising. In 2011, HMRP will capitalize this experience and encourage CBSP groups and private companies to follow TL system, proper storage, packaging, branding and marketing. It is expected that at least 10 CBSP groups will follow TL in 2011. Similarly, to increase the access of CBSP for seed quality control services, HMRP will provide training to about 50 agronomists from NARC, DoA and private sector, and policy advocacy will be continued to allow them for field inspection, sampling and seed testing.

B.3 CBSP Groups/ Cooperatives manage supply of quality seed

21. Strengthening the capacity of CBSP groups to produce and market quality maize seed is one of the most important outputs for HMRP IV. To ensure the capacity of CBSP groups, HMRP in 2011 has planned to train about 20 CSPs, continue supporting CBSP groups with equipment and small infrastructure (at least to 20 groups), train CBSP executives on seed value chain and business plan preparation, and provide training to seed producers on seed production, seed quality control and truthful labeling, seed marketing, group dynamics and GESI considerations. The executives of the CBSP groups will be trained on seed value chain, preparation of business development plan and plan execution.

B.4 NSB and NARC consider HMRP's experience in variety development, certification and release system

22. Maize breeding activities are targeted to develop varieties that are drought and low nitrogen tolerant, including development of QPM varieties. Four pipeline OPVs, including one yellow QPM will be proposed for release through NSB. Besides the NMRP data, the national varietal release committee is now considering farmers' perception on the acceptability of improved varieties in the national release system. This data is gathered by HMRP and its partners through the PVS Mother-Baby trials and other participatory activities implemented by the project.

5. PROJECT MANAGEMENT AND FINANCIAL RESOURCES

23. The total cost of the project is US\$ 5,636,000 for four years (August 2010 to July 2014) which is co-funded by SDC- US\$ 3,636,000 and USAID- US\$2,000,000. This budget includes the operational cost, source seed production, monitoring, training, equipment

purchase, vehicles procurement, small infrastructure, workshops, consultations, travel, data collection, socio-economic surveys, demonstration fields and market and field days, printing/dissemination of results, partial support for local administrative staff time, operational cost of one National Agronomist, one Seed Value Chain Expert, four Cluster Agronomists, one international staff, and other consultants/volunteers/interns as needed to successfully implement the project. The summary of budget for each outcome/component, by funding source, is presented in **Table 2**. Details are also given in **Annex 2**.

Table 2: HMRP IV Phase budget

Outcome/Output/Component	Phase Total Budget (US\$)		
	SDC	USAID	Total
Outcome A (Output A.1 to A.4)	1,615,423	916,173	2,531,596
Outcome B (Output B.1 to B.4)	646,251	363,497	1,009,748
NRS Expert Assistance (For Outcome A and B)	265,305	149,234	414,539
Total for Outcome A and B	2,526,979	1,428,904	3,955,883
Component C: CIMMYT Mexico Cost	697,323	358,017	1,055,340
Component D: CIMMYT Nepal Cost	411,698	213,079	624,777
Grand Total	3,636,000	2,000,000	5,636,000

24. Total accumulated expense from August 2010 to December 2010 was US\$ 102,930 of which SDC and USAID share corresponded to US\$ 66,400 and US\$ 36,530, respectively.

25. The total budget for 2011 (January-December) is US\$ 1,876,879. This amount is approximately six folds higher than the 2010 budget. This increment is mainly due to increase in the scope of the current Phase IV compared to Phase III. Major scope includes the inclusion of private sector in seed production and marketing, increase in number VDC coverage, inclusion of new activities and target of partner organizations, provision of seed revolving funds and so on. The summary of proposed budget for 2011, its comparison with 2010 and budget source is presented in **Table 3** and details are presented in **Annex 2**.

Table 3: Project Budget for 2011

Outcome/Output/Component	2010 Budget (US\$)	2011 Budget (US\$)	% Change	2011 Source (US\$)		
				SDC	USAID	Total
Outcome A and B	303,000	1,095,322*	261%	717,436	377,886	1,095,322
NRS Expert Assistance	-	96,178	100%	62,997	33,181	96,178
Component C: CIMMYT Mexico	86,000	255,602	197%	167,419	88,183	255,602
Component D: CIMMYT Nepal	41,000	179,777	338%	117,754	62,023	179,777
Total	430,000	1,626,879	278%	1,065,606	561,273	1,626,879

*This amount comprises 38.2% budget from 2011/12.

Detail of Fund Flow Analysis (FFA) of 2011 is presented in **Annex 3**.

Annex 1: Outcome Monitoring Summary Report (OMS) of 2010

Indicators	Baseline	Phase target	Situation	Comments
1. Hill maize farmers, especially poor and DAGs, adopt sustainable and profitable maize varieties and technologies to enhance productivity and marketing opportunities				
1.1. 250 tons of improved seed distributed annually by HMRP partners through CBSP	0	250 t	830 t seed produced (174 farmers groups)	Heavy rainfall during harvesting increased cob rots and insect damage in the stored maize
1.2. 4,000 poor households adopting new varieties and/or crop management practices across more than 30 hill districts annually	0	4,000 poor households (among them 3,000 DAGs HH) by June 2010	Achieved. In 2010, more than 21,000 HHs planted new maize OPVs & AIs	Increased efforts made by the project to reach even more DAGs
1.3. 15-30% increase in farm level productivity	2,091 kg/ha	20% farm level productivity increase	Achieved. 2,200 kg/ha national average has been achieved in 2010	Drought after maize sowing affected the maize throughout the hills
2. NARC and NSB have enhanced institutional capacity to promote source seed production and facilitate certification procedure				
2.1. 2,500 kg of FS of farmers preferred varieties produced by NARC	0	2,500 kg	Achieved. 17.5 t of BS/FS produced	Delayed onset of rainfall affected seed production
2.2 Variety release system that uses on-farm data and farmers perceptions	Discussion with policy makers was on-going	One system established within NARC and NSB by 2008	Achieved. NSB considering farmer perceptions in the variety release system	NSB and NARC have now adopted the use of this system in the release of varieties from other crops
2.3. Three varieties released under the streamlined variety release system by 2009	Verification was on-going	Three varieties released in Phase III	Achieved. Four OPVs varieties released (Mana-4, 5, 6 and Poshilo Makai-1) during 2008 and 2009. One yellow QPM variety under process	Several new improved OPVs are in pipeline for release. Newly released varieties under extensive seed multiplication for use in Phase IV
2.4. Authorization from NSB for NARC breeders to inspect seed plot for truthful labeling	Discussion with policy makers was on-going	By 2009, authorization for truthful labeling is granted to NARC breeders	Discussions have continued aiming at having the required authorization to NARC breeders	On track

Annex 2 Phase and Annual Budget

OUTCOME A (COMPONENT A)	2010/11			2011/12			2012/13			2013/14			TOTAL		
	SDC	USAID	Total	SDC	USAID	Total	SDC	USAID	Total	SDC	USAID	Total	SDC	USAID	Total
OUTPUT A.1 CBSP Groups know and use available improved maize varieties and technologies	136,261	76,647	212,908	118,659	66,746	185,405	116,743	65,668	182,411	100,039	56,272	156,311	471,702	265,333	737,035
OUTPUT A.2: Poor and disadvantaged households have increased access to quality maize seed and proven technologies	119,371	67,146	186,517	106,840	60,097	166,937	100,171	56,346	156,517	100,171	56,346	156,517	426,553	239,935	666,488
OUTPUT A.3: CBSP groups/Cooperatives supply quality seeds at competitive market price	120,460	67,758	188,218	118,870	66,865	185,735	117,590	66,145	183,735	113,045	63,588	176,633	469,965	264,356	734,321
OUTPUT A.4: Poor and disadvantaged maize producing HHs have access to multiple agricultural interventions for enhanced productivity	50,819	28,585	79,404	50,819	28,585	79,404	108,079	60,794	168,873	50,819	28,585	79,404	260,536	146,549	407,085
TOTAL FOR OUTCOME A (A.1 to A.4)	426,911	240,136	667,047	395,188	222,293	617,481	442,583	248,953	691,536	364,074	204,791	568,865	1,628,756	916,173	2,544,929
OUTCOME B (COMPONENT B)															
OUTPUT B.1: National Seed Board (NSB), NARC, DoA allow decentralized source seed production system	61,417	34,547	95,964	61,156	34,400	95,556	55,017	30,947	85,964	55,017	30,947	85,964	232,607	130,841	363,448
OUTPUT B.2: Public and private institutions obtain seed inspection mandate and license	29,729	16,723	46,452	29,729	16,723	46,452	29,729	16,723	46,452	3,605	2,028	5,633	92,792	52,197	144,989
OUTPUT B.3: CBSP/cooperatives manage supply of quality seed	60,503	34,033	94,536	60,633	34,106	94,739	55,931	31,461	87,392	55,931	31,461	87,392	232,998	131,061	364,059
OUTPUT B.4: NSB and NARC consider CBSP's experience in variety development, certification and release system	19,543	10,981	30,524	17,409	9,784	27,193	16,079	9,045	25,124	34,823	19,588	54,411	87,854	49,398	137,252
TOTAL FOR OUTCOME B (B.1 to B.4)	171,192	96,284	267,476	168,927	95,013	263,940	156,756	88,176	244,932	149,376	84,024	233,400	646,251	363,497	1,009,748
NRS EXPERT ASSISTANCE (For Outcome A and B)															
1. NRS Agronomists	33,712	18,963	52,675	35,398	19,911	55,309	37,167	20,907	58,074	39,026	21,952	60,978	145,303	81,733	227,036
2. Cluster Agronomists	27,842	15,661	43,503	29,234	16,444	45,678	30,696	17,266	47,962	32,230	18,130	50,360	120,002	67,501	187,503
TOTAL	61,554	34,624	96,178	64,632	36,355	100,987	67,863	38,173	106,036	71,256	40,082	111,338	265,305	149,234	414,539
TOTAL FOR OUTCOMES A & B INCLUDING NRS COST	659,657	371,044	1,030,701	628,747	353,661	982,408	667,202	375,302	1,042,504	584,706	328,897	913,603	2,540,312	1,428,904	3,969,216
COMPONENT C: CIMMYT MEXICO COST															
C.1 Expert assistance-IRS-G. Ortiz	103,000	51,000	154,000	107,800	53,900	161,700	113,000	57,000	170,000	119,000	59,500	178,500	442,800	221,400	664,200
C.2 Indirect cost	65,688	35,914	101,602	62,007	32,968	94,975	65,110	34,715	99,825	62,385	33,020	95,405	255,190	136,617	391,807
Total CIMMYT Mexico Cost	168,688	86,914	255,602	169,807	86,868	256,675	178,110	91,715	269,825	181,385	92,520	273,905	697,990	358,017	1,056,007
COMPONENT D: CIMMYT NEPAL COST															
D.1 Travel	15,000	10,000	25,000	20,000	10,000	30,000	20,000	10,000	30,000	20,000	10,000	30,000	75,000	40,000	115,000
D.2 Services (i.e. consultancies)	16,304	10,000	26,304	20,000	10,000	30,000	20,000	10,000	30,000	20,000	10,000	30,000	76,304	40,000	116,304
D.3 Office support (cost sharing)	23,729	14,744	38,473	28,667	14,333	43,000	30,667	15,333	46,000	33,333	16,667	50,000	116,396	61,077	177,473
D.4 Vehicle repair and maintenance	13,333	6,667	20,000	14,000	7,000	21,000	14,667	7,333	22,000	15,333	7,667	23,000	57,333	28,667	86,000
D.5 Equipment	13,333	6,667	20,000	13,333	6,667	20,000	13,333	6,667	20,000	13,333	6,667	20,000	53,332	26,668	80,000
D.6 Vehicles and motorbikes	33,333	16,667	50,000	-	-	-	-	-	-	-	-	-	33,333	16,667	50,000
Total CIMMYT Nepal Cost	115,032	64,745	179,777	96,000	48,000	144,000	98,667	49,333	148,000	101,999	51,001	153,000	411,698	213,079	624,777
GRAND TOTAL	943,377	522,703	1,466,080	894,554	488,529	1,383,083	943,979	516,350	1,460,329	868,090	472,418	1,340,508	3,650,000	2,000,000	5,650,000

Annex 3: Projected Fund Flow Analysis (FFA)**Project:**

Hill Maize Research Project -IV

Period of analysis

August 2010- July 2011

Budget

1,466,080

Currency

US\$

Currency		US\$	Fund Receivers					Beneficiaries			Fund Allocation		
	Budget Headings	Budget Amount	Geographical Outreach			Discrimination cast, ethnicity / gender		Disadvantaged group perspective (Economically poor and socially			Cluster perspective (Swiss cluster districts and		
			District/rural	Central	Internation al	Discrimina ted	Non - Discriminat ed	DAG	Non-DAG	General and common costs	Central cluster districts	Western cluster districts	Others and National
1	2	3	4	5	6	7	8	9	10	11	12	13	14
A.1	CBSP. Groups Know and Use available improved maize varieties and technologies	212,908	80%	20%		70%	30%	60%	20%	20%	20%	20%	60%
	Poor and disadvantaged households have increased access to quality maize seed and proven technologies												
A.2		186,517	80%	20%		60%	40%	60%	20%	20%	20%	20%	60%
A.3	<u>CBSP groups/Cooperatives supply quality seeds at competitive market price</u>	188,218	95%	5%		70%	30%				20%	20%	60%
	Poor and disadvantaged maize producing HHs have access to multiple agricultural interventions for enhanced productivity	79,404											
A.4			95%	5%		60%	40%	70%	10%	20%	20%	20%	60%
	Sub-Total	667,047											
	National Seed Board (NSB), NARC, DoA allow decentralized source seed production system												
B.1		95,964	80%	20%		60%	40%	70%	10%	20%	20%	20%	60%
B.2	Public and private institutions obtain seed inspection mandate and license	46,452	80%	20%		60%	40%	70%	10%	20%	20%	20%	60%
B.3	CBSP/cooperatives manage supply of quality seed	94,536	80%	20%		60%	40%	70%	10%	20%	20%	20%	60%
	NSB and NARC consider HMRP's experience in variety development, certification and release system	30,524	80%	20%		60%	40%	70%	10%	20%	20%	20%	60%
	Sub-Total	267,476											
C.1	NRS Agronomist and SVC Expert-2	52,675			100%		100%	70%	10%	20%	20%	20%	60%
C.2	Cluster Agronomists-4	43,503			100%		100%			100%	25%	50%	25%
	Sub-Total	96,178											
D.1	Expert Assistance-IRS	154,000		100%		100%		100%			20%	20%	60%
D.2	Indirect Cost	101,602	100%			50%	50%			100%	0%	0%	100%
	Sub-Total	255,602											
D.3	Travel	25,000	50%	30%	30%	60%	40%	40%	40%	20%	0%	0%	100%
D.4	Services (i.e. consultancies)	26,304		100%		50%	50%	70%	20%	10%	0%	0%	100%
D.5	Office support (cost sharing)	38,473		100%		80%	20%			100%	0%	0%	100%
D.6	Vehicle repair and maintenance	20,000	20%	80%		20%	80%			100%	0%	0%	100%
D.7	Equipment	20,000		100%	0%		100%			100%	0%	0%	100%
D.8	Vehicles and motorbikes	50,000		100%			100%			100%	0%	0%	100%
	Sub-Total	179,777											
	Total amount	1,466,080											
			905,864	459,038	103,678	868,558	597,522	701,756	135,101	441,004	239,115	249,991	976,974

Action Line	Budget
Gender Beneficiary Monitoring	
CBSP. Groups Know and Use available improved maize varieties and technologies	212,908
National Seed Board (NSB), NARC, DoA allow decentralized source seed production system	95,964

Male	Female
40%	60%
30%	70%

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Annex 4: List of Partners and SGPs

SN	Ref No.	Organization Name	Project Title	District/Location	VDC Name	VDCs (No)	Beneficiary HH (No)	CBSP (ha)	CBSP Group (No)	SSP-BS (KG)	SSP-FS (KG)	SSP for (BS+FS) (ha)	PVS (No)	IRD (No)	ICT (No)	VDR (No)	VMI (No)	TVD (No)	Other Trails (No)	Budget ('000 Rs)
1	1.01	Agriculture Botany Division, NARC, Khumaltar, Lalitpur	On farm Source Seed (B.S.+F.S.) Production and Varietal Maintenance of Deuti and Manakamana-4.	All								1.6					1			750.0
2	1.02	Agriculture Research Station, Pakhribas, Dhankuta	Source seed production cum location specific varietal trial on maize	All						180	6300								3	991.0
3	1.03	Agriculture Research Station, Pakhribas, Dhankuta	Informal Research and Development (IRD) and Participatory Variety Selection (PVS) in eastern hills of Nepal	Khotang, Okhaldunga									15	660						556.0
4	1.04	Agriculture Research Station, Pakhribas, Dhankuta	Up-scaling of maize vegetable intercropping and composting technologies in Khotang and Okhaldhunga districts of Nepal	Khotang, Okhaldunga			60													980.0
5	1.05	Agriculture Research Station, Pakhribas, Dhankuta	Community based seed production in Khotang and Okhaldhung districts of Nepal	Khotang, Okhaldunga	Okhaldhunga (Rumjatar, Salleri), Khotang (Diktal, Bamrang, Numthala)	5		20												985.0
6	1.06	Agriculture Research Station, Dasharathpur, Surkhet	Increasing Food and Nutritional Security in hilly region of Surkhet district by Developing Quality Protein Maize (QPM) Village through Community Based Production	Surkhet	Lekparajul, Satakhani, Gadhi	3		20	3											825.0
7	1.07	Agriculture Research Station, Dasharathpur, Surkhet	On-Station Source Seed Production of Different Maize Varieties	Surkhet				10		1000	20000									771.0
8	1.09	National Ginger Research Program, Kapurkot, Salyan	Increasing the maize production through selection of high yielding varieties and seed production in mid-western hills of Nepal	Salyan				8	2			1.25	2	350						400.0
9	1.11	Hill Crops Research Program (HCRP), Kabre, Dolakha	Increased production and productivity of maize for improved livelihood and food security of hill farmers focusing to DAGs and women through varietal and agronomic manipulations in the context to climate change in the research command areas of HCRP, Kabre	Dolakha, Ramechhap, Sindhupalchowk, Kavrepalanchowk, Dhading			1166													670.0
10	1.12	Hill Crops Research Program (HCRP), Kabre, Dolakha	Increased Income and Food Security of Socially Disadvantaged Remote Hill Farmers Through validation, dissemination, Quality Protein Maize based Intercropping and Soil Fertility Management of promising and released maize varieties in the command area of HCRP Kabre	Dolakha, Ramechhap, Sindhupalchowk, Kavrepalanchowk			82								33				20	700.0
11	1.13	Hill Crops Research Program (HCRP), Kabre, Dolakha	On-Station and On-Farm source seed production for availability of quality seed	Dolkha, Kavrepalanchowk	Kavre (Kushadevi), Dolkha (Kabre)	2	130		4	2750	1750	27								600.0

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12	1.15	Hill Crops Research Program (HCRP), Kabre, Dolakha	Improved livelihood and food security of remote hill farmers through availability of quality maize seed produced through community based seed production program in	Dolakha, Ramechhap, Sindhupalchowk, Kavre	Dolkha (Kabre, Pahsku, Bhimeshwor), Ramechhap (Okhrene, Nagdaha, Manthali), Sindhupalchowk	9	343	53	10										718.0
13	1.16	National Maize Research Program, Rampur, Chitwan	Development of high yielding OPVs suitable for mid hills of Nepal	Chitwan												3		30	1,230.0
14	1.17	National Maize Research Program, Rampur, Chitwan	Maintenance of released maize varieties through Improvement of husk cover and agronomic traits	Chitwan												4			320.0
15	1.19	National Maize Research Program, Rampur, Chitwan	Quality source seed production of released maize varieties	Chitwan					2000	23000	14								1,500.0
16	1.20	National Maize Research Program, Rampur, Chitwan	Maintenance, Improvement and Quality Breeder Seed Production of released and pre released Open Pollinated Maize Varieties for hills of Nepal	Dailekh, Kavrepalanchowk					1000		1.5								345.0
17	1.21	National Maize Research Program, Rampur, Chitwan	Development of high yielding and drought tolerant OPVs suitable for mid hills of Nepal	Chitwan												1		7	1,050.0
18	1.22	National Maize Research Program, Rampur, Chitwan	Up-scaling of proven maize based management technologies and validation of resource conservation technologies for maize in western mid-hills of Nepal	Syangja, Palpa													3		615.0
19	1.24	National Maize Research Program, Rampur, Chitwan	Improvement of pre-released and pipeline maize varieties for mid hills of Nepal	Chitwan							1.5					9			320.0
20	1.28	Regional Agricultural Research Station, Lumle	Improved Livelihoods through Community Based Seed Production Program (CBSP) on Maize in Western Hills	Gulmi, Syangja, Palpa, Baglung	Syangja (Jagatradevi* Alamdevi*, Bicharichautara Bahakot*, Rangbhang* Taxar*, Pelkachaur*		969	80	24										920.0
21	1.30	Regional Agricultural Research Station, Lumle	Promotion and dissemination of superior maize varieties in western hills of Nepal through FAT and IRD	Gulmi, Syangja, Palpa, Baglung			2000						2000						570.0
22	1.31	Regional Agricultural Research Station, Lumle	Promotion of profitable and environmentally sound technologies on maize based cropping system	Gulmi, Syangja, Palpa, Baglung			731							36				8	700.0
23	1.33	Regional Agricultural Research Station, Lumle	On-farm and on-station source seed production of released and pipe-line varieties of maize in the western hills of Nepal	Gulmi, Syangja, Palpa, Baglung	Syangja (Thuladehi), Palpa (Birkot), Gulmi (Rimuwa), Baglung (Bhakumde)	4	44		300	3000									670.0
24	1.35	Regional Agricultural Research Station, Lumle	Livelihood enhancement of the marginal farmers through the promotion and dissemination of superior maize varieties in the western hills of Nepal	Gulmi, Syangja, Palpa, Baglung			2124					5	1600					5	800.0
25	1.36	Agriculture Research Station, Dasharathpur, Surkhet	Enhancing Maize productivity through improved agronomic management in the western hills of Nepal	Surkhet													3		420.0

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26	1.38	Agriculture Research Station, Pakhribas, Dhankuta	Validation of sustainable management of Grey Leaf Spot and White Grubs in maize in Khotang and Okahadhunga Districts	Khotang, Okhaldunga															520.0
27	1.40	Agriculture Research Station, Dailekh	Promotion and dissemination of high yielding maize varieties in mid and far western hills of Nepal through IRD, FAT and PVS	Dailekh, Kalikot, Achham, Bhajang		200						8	800						377.0
28	1.41	Agriculture Research Station, Dailekh	Increasing availability of maize source seed through on-station and community based seed production program in mid hills of Nepal	Dailekh	Baraha, Bindhabasini, Malika, Dandaparajul, Narayan Municipality, Lulu	6	210	65	8		1.5								703.0
29	1.42	Agriculture Research Station, Dailekh	Adding to the living Standard of Maize Growers in the Mid-hills by Adopting Sustainable Maize Based Cropping System	Dailekh	Narayan, Baraha, Malika	3	118								16				420.0
30	1.46	Agriculture Botany Division, NARC, Khumaltar, Lalitpur	Development of GLS Tolerant Maize syanthetic populations for GLS epidemic environments of Nepal	Lalitpur															250.0
31	1.47	Agriculture Research Station, Doti	Improving Livelihoods of far western hill people through increasing production of maize by assuring their access to improved technologies of maize and on-sation source seed production	Doti			9	5			2.5	6	300						670.0
32	1.48	CPDD, Khumaltar	Production and communication of imvroved maize and maize based technology through print and electronic media (Radio, FM, TV)																670.0
33	2.01	Department of Agriculture/Crop Development Directorate, Hariharbawan, Lalitpur	Enhancing food security at local level Through Maize Technology Verification/ Dissemination and Community Based Seed Production (CBS) in the Middle-hills of Nepal	1, 2, 3, 4		107	8000	300	108			40	6000	120					13,484.882
34	4.17	Youth Manpower Mobilization Centre (YMMC), Jajarkot	Strengthening Community Based Seed Production and dissemination of improved maize technologies and Varieties in the food deficit and GLS prone VDCs of Jajarkot District	Jajarkot	Karki Gaun, Bhur, Jhapra, Punma, Salma	5	1,252	25	6		3	10	1100	60				15	650.0
35	4.18	Asaahaya Upakar Kendra/Garden, Kathmandu	Maize Seed Production and Dissemination Project	Kavrepalanchowk	Fulbari, Methinko, Baluwa	3	3405	15	6			10	1000	20					500.0
36	4.19	Youth Manpower Mobilization Centre (YMMC), Jajarkot	Dissemination of Improved Maize technologies and varieties to improve food and nutrition security of poor and disadvantaged farmers in the remote VDCs of Surkhet district	Surkhet	Baderichaur, Aagri Gaun, Raakam, Kaprichaur, Dandakhali	5	778	10	5			12	700	60				12	650.0

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37	4.20	Agri-Business and Trade Promotion Multipurpose Cooperative Ltd. (ABTRACO), Anamnagar, Kathamandu	Community Based Seed Production (CBSP) and Marketing System Leading to Establishment of Maize Seed Village Program in Combination with Participatory Varietal Selection (PVS) and Informal Research and Development (IRD) Programs in farmers' field in Dhading Districts	Dhading	Sangkosh, Maidi, Khalte, Murali-Bhanjyang, Salyantar, Gajuri, Naubise	7	350	35	7			5	2	500	7					650.0
38	4.22	Center for Community Resource and Environmental Development (CeCRED)-Nepal	Livelihoods improvements of resource poor and backward communities through promotion of profitable maize farming	Baglung	Chhisti, Jaidi, Arjewa	3	400		6				10	500	6					500.0
39	4.26	Development Initiative Welfare Organization (DIWO)	Maize Technology Promotion and Dissemination among the Mid-hill Farmers Community of Western Region of Nepal	Syangja, Palpa	Syangja (Khilungdeurali, Arukharka, Jagatbhayang, Tindobate, Tulsibhanjyang, Srikrishna-Gandaki), Palpa (Pokharathok)	7	1,326	35	10			5	5	800	20				35	650.0
40	4.27	Forum for Rural Welfare and Agricultural Reform for Development (FORWARD Nepal)	Improving Food Security through Community Based Seed Production Initiatives in Surkhet District	Surkhet	Jarbuta, Satakhani, kUnathari, Lekgaun	4	1000	6	2			2	10	1000	10					598.4
41	4.28	Local Initiatives for Biodiversity, Research and Development (LI-BIRD)	Enterprising Community Based Seed Producer Groups in the Western Mid Hill Districts of Nepal	Gulmi, Palpa, Syangja	Gulmi (Darbar-Devasthan, Simchour), Palpa (Kusumkhola), Syangja (Alamdevi, Birgha)	5	600	35	5			2	5	500						599.0
42	4.29	Local Initiatives for Biodiversity, Research and Development (LI-BIRD)	Demonstration and promotion of Maize Based Technologies in Western Mid-hill Districts of Nepal	Gulmi, Palpa, syangja	Gulmi (Birbas, Hardineta), Palpa (Thimure, Palung-Mainadi), Syangja (Shrikrishna-gandaki, Birgha)	6	1500						12	1500	24					649.0
43	4.31	MADE-Nepal	Promoting improved maize varieties through participatory research and community based seed production in Maize-based farming systems in Dailekh district of Nepal	Dailekh	Baraha, Shery, Dada-Paraju, Belpata	4	500	10	5				15	1500	15					649.0
44	4.32	MADE-Nepal	Promoting improved maize varieties through participatory research and community based seed production in Maize-based farming systems in Kalikot district of Nepal	Kalikot	Raku, Kotbada, lalu	3	500	6	5				15	1000	20					650.0
45	4.39	Group of Helping Hands- (SAHAS) Nepal	Improvement of farm household income by enhancing production, productivity and sustainability of maize and maize based cropping system	Okhaldhunga	Kuntadevi, Baruneshwor, Katunje, Toksel, Balakhu	5	1500	15	3			1	5	1500	5					650.0
46	4.40	Technical Training & Research Initiative Khumaltar, Lalitpur	Selection of location specific high yielding maize varieties with farmers' preferred traits and their seed multiplication	Kavrepalanchowk	Kabre, Baluwapati	2	800	0	4				4	500	6				2	500.0

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47	4.41	SUPPORT (Social Upliftment through Participatory Programmes, Research and Training) Foundation	Scaling up and dissemination of best Bets technologies in Achham, Bajhang, Baitadi, Dadeldhura and Doti districts	Aacham, Bajhang, Baitadi, Dadeldhura, Doti	Doti (Laxminagar, Chhathiwan, Ghanteshwor), Achham (Chaphamandu, Samtada, Batulasen), Dadeldhura (Amarghadi, Gankhet, Alital), Bajhang (Deulek, Deulikot, Sunkuda), Baitadi (Nwali, Deulek, Shreekedar)	15	5,000		30			15	4000	150					800.0
48	4.42	SUPPORT (Social Upliftment through Participatory Programmes, Research and Training) Foundation	Strengthening Community Based Seed Producer (CBSP) groups and maize seed production and marketing in Achham, Baitadi and Dadeldhura districts	Achham, Baitadi, Dadeldhura	Aacham (Chamunda), Baitadi (Srikot, Shreekedar), Dadeldhura (Amarghadi, Alital)	5	2,400	25	9			5	5	2000					750.0
49	4.44	Hill Development Council, Kathmandu	Enhancing food security through sustainable seed security program to improve the livelihoods of marginalized rural poor	Dhading	Joghimara, Dhusha, Benighat	3	525	3	5			10	600	75					550.0
50	4.46	Forest and Environment Protection Society	Scientific and Commercial Maize Production, Processing and Promotion	Dhading	Dhola, Maidi, Sankosh, Nilkantha, Murali Bhayanjiyang, Sunaula Bazar, Khalte, Nalang, Salang, Khari	10	1000	5	5			10	500	15					550.0
51	4.47	Downtrodden and Oppressed Society, Gorkha	Production of Quality Maize seed and enhancing the production of maize through the applications of maize production technologies	Ramechhap	Kathajor, Nagdaha, Bijulikot	3	500	5	5			4	1000	12				10	550.0
52	4.52	EcoHimal Nepal, Kathmandu	Improving the Food Security and Livelihoods in Northern Khotang District	Khotang	Bakchacol, Dipsung, Rakhabangdel, Aaiselukharka, Jaleshwori, Maheshwori, Makpa	7	1210	2	2			0	10	500	30			100	650.0
53	4.53	Lumbini Social Development Center, Arghakanchi	Maize varietal dissemination and validation and CBSP and Marketing in Gulmi District	Gulmi	Purkot, Bhanbhane, Myalpokhari, Dhurkot-Rajasthal, Malagari, Sirsine	6	1600	2	2			10	700	10					550.0
54	4.60	Human Rights and Environment Development Center, Mugu	Community based Seed Production and Marketing using Value Chain Approach	Kalikot, Dailekh	Kalikot (Bhatta), Dailekh (Pipalkot)	2	650	10	4			5	1000	10					600.0
55	4.66	Khotang Development Forum	Improved maize promotion in Khotang	Khotang	Diktel, Bamrang, Nunthala, Buipa, Vijaykharka, Rajapani, Lichki Ramche	29	1500	7	4			0.5	4	1500	4				600.0
56	5.01	Hariyali Community Seed Company Ltd and Sindhu Tuki Seed Cooperative, Thumpakhar Sindhupalchowk	Community Based Seed Production and Marketing through technology dissemination and business services to poor and DAG farmers in Sindhupalchowk district	Sindhupalchowk	Pangretar, Sunkhani, Thokarpa, Yamundanda, Phulpingdanda, Thumpakhar	6	1000	40	30			15	12	1000	40				600.0
57	5.02	Anamolbiu Company Pvt. Ltd., Chitwan	Linking Maize Seed Production of Released and Pipeline Varieties for Securing Livelihood of Resource Poor Farmers in Baglung and Ramechhap districts of Nepal	Baglung	Baglung (Bhakunde, Tangram), Ramechhap (Nagdaha, Manthali)	4	1500		4			15	6	500	4				499.0

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58	5.03	Sindhu Seed producer cooperative Association, Sindhupalchok	Validation and dissemination of new and profitable maize varieties and technologies for improved food security and income of poor and DAGs in Dolakha District	Dolakha	Dolkha (Phasku, Powati, Bheptu, Vimeshwor, Katakuti),	5	1000	10	7			3	10	1400	25					550.0
59	5.07	Global Agri-tech Nepal Pvt. Ltd, Banke	CBSP and PVS of Maize for enhanced food security and farm income in selected VDCs of Jajarkot	Jajarkot	Karki-Gaun, Bhoor, Sima, Khalanga, Junga-thapachour	5	1066	15	5			3	10	1000	15					550.0
60	5.09	Everest Media Consults (EMC)	Media Promotion of Hill Maize Research Project (MMRP) Phase IV																	505.6
		Total				298	49,039	881	340	7,230	54,050	110	302	39,510	848	4	14	6	247	51,701
		Cost for 34,000 IRD sets and 600 PVS sets																		4,392
		Expenses to purchase 2 vehicles and 10 motorbikes for partners																		4,392
		Fund for small equipments and infrastructure support to CBSP and ARS; Seed																		18,378
		GRAND TOTAL FOR 2011																		78,863

Annex 5: District covered, by Partners

SN	Partners	Propo sal (No)	Presence of Partners in districts																		
			Adara	Baglung	Baitadi	Bajura	Dadara	Dailekh	Dading	Dakka	Doti	Gulmi	Jajarkot	Kailash	Kavre	Kyung	Chitwan	Palpa	Ratnap	Sitkoti	Surya
A	NARC (13 districts)																				
1	Agriculture Botany Division, NARC, Khumaltar, Lalitpur	2								1				1					1		
2	Agriculture Research Station, Dailekh	3						1													
3	Agriculture Research Station, Dasharathpur, Surkhet	3																		1	
4	Agriculture Research Station, Doti	1									1										
5	Agriculture Research Station, Pakhribas, Dhankuta	5																			
6	CPDD, Khumaltar	1																			
7	Hill Crops Research Program (HCRP), Kabre, Dolakha	4							1	1				1				1	1		
8	National Ginger Research Program, Kapurkot, Salyan	1						1					1	1							
9	National Maize Research Program, Rampur, Chitwan	7																			
10	Regional Agricultural Research Station, Lumle	5		1								1					1			1	
B	DoA- CDD (20 DADOS-20 districts))	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
C	NGOs/CBOs/Cooperatives/ Companies																				
1	Agri-Business and Trade Promotion Multipurpose Cooperative Ltd. (ABTRACO), Anamnagar, Kathamandu	1							1												
2	Asaahaya Upakar Kendra/Garden, Kathmandu	1											1								
3	Center for Community Resource and Environmental Development (CeCRED)- Nepal	1		1																	
4	HNRDC, Mugu	1						1					1								
5	Development Initiative Welfare Organization (DIWO)	1															1			1	
6	Downtrodden and Oppressed Society, Gorkha	1																1			
7	EcoHimal Nepal, Kathmandu	1													1						
8	Forest and Environment Protection Society	1							1												

9	Forum for Rural Welfare and Agricultural Reform for Development (FORWARD Nepal)	1																			1	
10	Group of Helping Hands- (SAHAS) Nepal	1														1						
11	Hill Development Council, Kathmandu	1						1														
12	Khotang Development Forum	1													1							
13	Local Initiatives for Biodiversity, Research and Development (LI-BIRD)	2									1						1					1
14	Lumbini Social Development Center, Arghakanchi	1									1											
15	MADE-Nepal	2					1						1									
16	SUPPORT (Social Upliftment through Participatory Programmes, Research and Training) Foundation	2	1		1	1	1				1											
17	Technical Training & Research Initiative Khumaltar, Lalitpur	1												1								
18	Youth Manpower Mobilization Centre (YMMC), Jajarkot	2										1									1	
19	Anamolbiu Company Pvt. Ltd., Chitwan	1		1																		
20	Everest Media Consults (EMC)	1																				
21	Global Agri-tech Nepal Pvt. Ltd, Banke	1										1										
22	Hariyali Community Seed Company Ltd and Sindhu Tuki Seed Cooperative, Thumpakhar Sindhupalchowk	1																		1		
23	Sindhu Seed producer cooperative Association, Sindhupalchok	1							1													
Grand Total		60	2	4	2	2	2	5	5	4	3	4	4	4	5	3	2	4	3	4	4	4

6.1 Budget breakdown for ARS Lumle

Project title	4100	4110	4120	4130	4140	4150	4160	4180	4200	4220	4230	Total
	TA/DA	Vehicle/fuel	Wages	Lab/Res/Sup ply	Farm Supply	Books pubs.	Train	Farm repair	Rent/Ser	Vehi. Rep.	Stationary	
P1. - Promotion of profitable and environmentally sound technologies on maize based cropping system- Dr. E. M. Bhattarai												
Inter cropping Technology:	100	40	5	5	60	0	50	0	0	0	5	265.0
Maize + ginger (5 sets each districts-20 farmers), maize + Soyabean (in Palpa and Gulmi) 2 sites each districts-15 farmers each districts, maize +tomato in 4-sets 60 farmers in four district, maize + French bean (60 farmers in 4 districts) and Maize + cowpea 20 farmers' in 4 districts												
Diamond Trial: 20 farmers in 4 district	50	20	15	10	50	0	15	0	0	0	5	165.0
Promotion and demonstration of quality FYM production:	50	30	5	5	50	0	50	0	0	0	5	195.0
60 farmers in four districts in each treatments												
Farmers Training: 75 farmers per districts = 300 farmers	50	20	0	5	0	0	0	0	0	0	0	75.0
Sub- Total	250	110	25	25	160	0	115	0	0	0	15	700.0
P2. Livelihood enhancement of the marginal farmers through the promotion and dissemination of superior maize varieties in the western hills of Nepal- A. P. Poudel												
CFTTs - 5 sets each (normal and QPM) (one sets at RARS, Lumle and rest 4 sets at Baglung, Syangja, Palpa and Gulmi district)	50	10	5	10	10	0	20	0	0	0	0	105.0
PVS (Mother baby trials - 5 sets (Normal and QPM) - 10 mother (with and without fertilizers) and 300 babies	70	20	5	5	40	0	80	0	0	0	5	225.0
IRD - 1600 sets (Normal 800, Early, 400 and QPM 400) focusing DAGs - Deuti, Mana-1, Mana-5, Mana-6 for Normal season. Arun-2 for Early Season and Poshilo Makai-1 for QPM will be distributed.	80	50	10	0	70	0	0	0	0	0	20	230.0
Sub- Total	200	80	20	15	120	0	100	0	0	0	25	560.0
P3. On-farm and on-station source seed production of released and pipe-line varieties of maize in the western hills of Nepal- A. P. Poudel												
On Station: BS and FS production of Ganesh-2, Mana-5, Mana-6, and W and Y pop corns - 70, 100, 100, 15, 15 and 150, 400, 400, 25, 25 kg BS and FS respectively	10	15	250	0	130	0	0	0	0	0	10	415.0
On-farm: Source seed production of Mana-1, Mana-3, Mana-5, Mana-6 and Poshilo Makai 1 at Syangja, Palpa, Gulmi and Baglung Districts- Target of production of 600 kg FS for each variety	60	30	70	0	85	0	0	0	0	0	10	255.0
Sub- Total	70	45	320	0	215	0	0	0	0	0	20	670.0
P4. Improved livelihoods through Community Based Seed Production Program (CBSP) on maize in the western hills – H. P. Pathak												
CBSP 80 ha (Mana-1, Mana-3, Mana-5, Mana-6, Deuti and Arun-2 (Baglung, Syangja, Palpa and Gulimi) – 6 groups/district = 24 Groups	390	80	25	0	200	0	210	0	0	0	15	920.0
Sub- Total	390	80	25	0	200	0	210	0	0	0	15	920.0
P5. Promotion and dissemination of superior maize varieties in western hills of Nepal through FAT and IRD – A. P. Poudel												
FAT support DADO- 1600 sets in 4 districts (Baglung, Syangja, Palpa and Gulmi) 400 sets for each district (focusing DAGs) - Deuti, Mana-1, Mana-3, Mana-5, Mana-6	105	50	45	0	210	0	0	0	0	0	20	430.0
IRD Distribution 400 sets (200 QPM-Poshilo Makai -1 and 200 Early maize-Arun-2) in 4 district (Syangja, Palpa, Gulmi and Baglung) 100 (50 +50) sets each districts	35	15	15	0	70	0	0	0	0	0	5	140.0
Sub- Total	140	65	60	0	280	0	0	0	0	0	25	570.0
Administration (vehicle repair and maintenance)										240		240.0
Total for ARS Lumle	140	65	60	0	280	0	0	0	0	240	25	3,660.0

6.2 Budget breakdown for NMRP

Project title	4100	4110	4120	4130	4140	4150	4160	4180	4200	4220	4230	Total
	TA/DA	Vehicle/fuel	Wages	Lab/Res	Farm Supply	Books pubs.	Train.	Farm	Rent/	Vehi. Rep.	Stationary	
P 1: Development of high yielding, GLS and stem borer tolerant and early maturing OPVs and QPM suitable for mid hills of Nepal- D. B. Gurung												
Acquisition of exotic germplasm from CIMMYT and its regional offices, composition of 5 trial sets for multi-location testing (Screening nurseries, IYT, CVT CFFT, PVS)	300	100	350	10	300	20	100	10	0	20	20	1230
Sub- Total	300	100	350	10	300	20	100	10	0	20	20	1230
P. 2: Maintenance of released maize varieties through improvement of husk cover and other agronomic traits- B. R. Bhandari												
1. HC and agronomic traits improvement in Across9942x44 (ear to row cum SMS), Deuti, Shitala, Mana-4, Arun-4, Arun-1EV, Pool-17 using SMS and seed increase (BS production) for, FS, CFFT, PVS for next season	10	10	50	5	50						20	145
2. Prepare release proposal for either Arun-4 or Arun-1EV or both	5											5
3. Maintenance of yellow maize varieties (Mana-4, R/C, Arun-2) & white (Mana-3, Deuti, Shitala and Poshilo Makai-1), HC improvement of Deuti, Poshilo makai-1, Shitala and Mana-3 Through SMS and half sib family selection	5	5	50		40	5	40	10	0	10	5	170
Sub- Total	20	15	100	5	90	5	40	10	0	10	25	320
P 3: Quality source seed production of released maize varieties - B. R. Bhandari												
B/s and F/S production in 14 ha (Deuti 4, Mana-3,(4), Shitala-2, Poshilo Makai-1,(3), Mana-4 (1) and S99TLYQ-B (1)	50	40	575	20	650	15	75	45	0	20	10	1500
Sub- Total	50	40	575	20	650	15	75	45		20	10	1500
P 4: Maintenance , improvement and quality breeder seed production of released and pre-released open pollinated maize varieties -CB Kunwar												
improvement of released OPVs(Arun-1 & 4, Ganesh-1 & 2, mana-5 and 6) and pipeline varieties (HG A, B, & AB, Pool 16, Pool 15, RPOP1, 2, 3 & 4, Across 9331) through SMS and half sib family selection	20	15	115	5	110	10	50	5	0	10	5	345
Sub- Total	20	15	115	5	110	10	50	5		10	5	345
P 5: Development of high yielding and drought tolerant OPVs suitable for mid hills of Nepal-DB Gurung												
Acquisition of drought tolerant germplasm from DTMA and CIMMYT hyderabad and other regional offices, composition of trial sets for multi-location testing (Screening nurseries, IYT, CVT CFFT, PVS)	250	100	300	15	250	10	75	5	5	20	20	1050
Sub Total	250	100	300	15	250	10	75	5	5	20	20	1050
P 6: Up scaling of proven maize pest management technologies and validation of resource conservation technologies for maize in western mid hills of Nepal- P Thakur												
Upscaling of biorational pests(Stem borer, white grub, cut worms, termites, army worm), storage grain pest management, updating of farmers' indigenous knowledge through training, verification and demonstration of maize RCT (Zero tillage, minimum tillage bed planting, planting through punch/ ZAP planters) training on RCT practices, soil analysis before planting and after crop harvest	250	60	40	30	100	10	100		5	10	10	615
Sub Total	250	60	40	30	100	10	100		5	10	10	615
P 7: Improvement of pre- released and pipe line maize varieties for mid hills of Nepal- Jiban Shrestha												
Improvement of OPVs and QPM (S99TLYQ-B, S99TLYQ-AB, SO1IWQ-3, Arun-1 EV, Arun-4 and Pool 17) , HC improvent of pipeline varieties (P501 SRCO/ P502 SRCO, BGBYP and Across 9944/Across 9942)	20	15	100	5	100	5	50	10	0	10	5	320
Sub Total	20	15	100	5	100	5	50	10	0	10	5	320
Total for NMRP, Rampur	910	345	1580	90	1610	75	500	85	10	100	75	5380

6.3 Budget breakdown for HCRP, Kabre

Project title	4100	4110	4120	4130	4140	4150	4160	4180	4200	4220	4230	Total
TA/DA	Vehicle/fuel	Wages	Lab/Res/Supply	Farm Supply	Books pubs.	Train.	Farm repair	Rent/Ser	Vehi. Rep.	Stationary		
P1. On-Station and On-Farm source seed production for availability of quality seed – KB Koirala												
A. On-station variety maintenance and source seed production												
Deuti – 1.5 ha ((1500 kg BS and 500 kg FS)												
Ganesh 1- 1 ha (500 kg BS and 500 kg FS)												
S99TLYQ-B- 0.5 ha (250 kg BS and 250 kg FS)												
Rampur Composite-1 ha (500 kg BS and 500 kg FS)												
B. On-farm foundation seed production (Four groups, Area 27 ha, Production target: 27 tons FS):	122.0	40.0	170.0	-	130.0	-	120.0	-	-	-	10.0	592.0
❖ Naldhunga Pokhere Maize Seed Production Farmers' Group, Dolakha- Rampur Composite: 10 ha (10 tons)												
❖ Mainapokhari Seed Production Group, Dolakha-Ganesh 1: 5 ha (5 tons)												
❖ Sustainable Soil Management Group, Kushadevi, Kavre-Deuti: 10 ha (10 tons) Kabre Seed Producers Group, Dolakha-Poshilo Makai 1: 2 ha (2 tons)												
P2. Improved livelihood and food security of remote hill farmers through availability of quality maize seed produced through community based seed production program in the research												
A. Farmers' training												
B. On-farm improved seed production												
(Ten groups, Area 53 ha, Production target: 53 tons Improved seed):												
➤ Kiratichhap MPFG, Dolakha-Rampur Composite: 10 ha (10 tons)												
➤ Kamala Mai SPG, Fasku, Dolakha-Deuti: 5 ha (5 tons)												
➤ Lamatar MSPFG, Ramechhap-Ganesh 1: 5 ha (5 tons)												
➤ Nagthali, Dhobi, Ramechhap-Deuti: 5 ha (5 tons)												
➤ Ramechhap-Arun 2: 5 ha (5 tons)												
➤ Kalika SPFG, Sindhupalchowk-Deuti: 5 ha (5 tons)												
➤ Chandeshwori, Sindhupalchowk-Arun 2: 3 ha (3 tons)												
➤ Bhakunde AS co-operative, Kavre-Deuti: 5 ha (5 tons)												
➤ Ekta SPG, Mainapokhari, Dolakha-Ganesh 1: 5 ha (5 tons) SSMG, Kushadevi, Kavre-Deuti: 5 ha (5 tons)												
C. Monitoring and supervision												
D. Seed certification												
E. Seed marketing meeting												
P3. Increased Income and food security of socially disadvantaged Remote Hill Farmers Through validation, dissemination, quality protein maize based intercropping and soil fertility												
A. CFFT Normal, 6 sets, CFFT QPM, 6 sets, PVS using Mother-baby trials focusing to DAG: 12 sets, Informal Research and Development (IRDs) focusing to DAG (1000 sets (250 sets/district, 50 sets/VDC), 5 VDCs/district), Farmers' Acceptance Test (FAT) Support to DADOs focusing to DAG(1000 sets (250 sets/district, 50 sets/VDC), Informal Research and Development (IRDs) on QPM focusing to DAGs 400 sets (100 sets/district, 20 sets/VDC), 5 VDCs/district)	235.0	56.0	70.0	-	150.0	-	120.0	-	-	-	-	631.0
B. Maize-based intercropping with different components in farmers' field												
Maize+ Soyabean: 10 farmers												
Maize + ginger: 4 farmers												
Maize + Tomato: 3 farmers												
Maize+ Ricebean: 10 farmers												
Maize +Pea: 6 farmers												
C. Quality Improvement of FYM using black polythene sheet and EMI and demonstration of product on maize crop – 8 Demonstrations.												
P4. Increased production and productivity of maize for improved livelihood and food security of hill farmers focusing to DAGs and women through varietal and agronomic manipulations in the context to climate change in the research command areas of HCRP, Kabre – SR Subedi												
A. Identification of appropriate maize variety/ies and planting date in the context to climate change												
B. Up-scaling of detasseling technology for increased production and productivity-20 farmers/district	257.0	75.0	39.0		31.0		229.0				10.0	641.0
C. Up-scaling of on-farm maize seed Priming technology for enhanced productivity-20 farmers/district												
D. Farmers' preferences Identification towards different maize varieties (6 varieties included in PVS)												
Administration (Vehicle repair)												
Total for Kabre	836.0	241.0	309.0	-	403.0	-	669.0	-	-	-	210.0	210.0
											20.0	2,688.0

6.4 Budget breakdown for CPDD, Khumaltar

Project title	4100	4110	4120	4130	4140	4150	4160	4180	4200	4220	4230	Total
	TA/DA	Vehicle/fue	Wages	Lab/Res. supply	Farm Supply	Books pubs.	Trainings	Farm repair	Rent/ser	Vehi. Rep.	Stationary	
P1. Production and Communication of improved maize and maize based technologies through Print & Electronic media (Radio, TV, FM) - Manoj Thakur - CPDD												
1. Production & Communication of improved maize and maize based technologies	230	25	0	0	0	300	85	0	0	0	30	670.0

6.5 Budget breakdown for ARS Pakhribas

Project title	4100	4110	4120	4130	4140	4150	4160	4180	4200	4220	4230	
	TA/DA	Vehicle/fu	Wages	Lab/Res/Sup	Farm	Books	Train.	Farm	Rent/Ser	Vehi. Rep.	Stationery	
HMRP-1. Varietal dissemination of maize through Informal Research and Development (IRD) and Participatory Variety Selection (PVS) in eastern hills of Nepal.- JB Adhikari												
1. Deuti-340, Shitala-242, Man3-1220, Ganesh1 - 625, Arun1-175, Man4-20 will be distributed in OR sites.	120	10	10	2	45	8						195.0
2. PVS- Mother trials 15 sets, Baby trials 270 sets.	100	20	30	3	100	8						261.0
3. IRD on QPM 60 sets in Okhaldhunga	67	5	10	2	9	7						100.0
Sub- Total	287	35	50	7	154	23	0	0	0	0	0	556.0
CBSP 20 ha (20 t certified seed of Mana-4; Mana-3; Ganesh-1 in Okhaldhunga and Khotang districts in 4 groups and support to old groups)	341	64	40	60	180	90	210					985.0
HMRP-3. Up-scaling of quality protein maize (QPM) vegetable intercropping and composting technologies in Khotang and Okhaldhunga districts of Nepal.- TR Chapagain.												
Composting and QPM intercropping techniques.	325	45	125	45	240	100	100					980.0
HMRP-4. Source seed production cum location specific varietal trial on maize: RN Chaudhary												
Source seed production of Ganesh-1 (30, 1200 kg), Mana-3 (60, 2500 kg), Arun-1 (20, 1000 kg), Deuti (30, 800kg), Mana-4 (20, 400 kg), QPMs (Poshilo Makai-1 20, 400 kg) BS, FS respectively, varietal trials, maintenance	145	70	535	0	193	36	12	0	0	0	0	991.0
HMRP-5. Validation of Sustainable Management of Grey Leaf Spot and White Grubs in Maize in Khotang and Okhaldhunga Districts- NK Dangal.												
Validation and dissemination of GLS and white grub management.	160	30	60	59	39	62	70					480.0
ADMINISTRATIVE											40	40.0
Total for ARS Pakhribas	1258	244	810	171	806	311	392	0	0	0	40	4,032.0

6.6 Budget breakdown for ARS Dailekh

Project title	4100	4110	4120	4130	4140	4150	4160	4180	4200	4220	4230	Total
	TA/DA	Vehicle/fuel	Wages	Lab/res supply	Farm supply	Books pubs	Training	farm repair	Rent/serv	vehi Rep.	Stationery	(NRs,000)
P1 Adding to the living Standard of Maize Growers in the Mid-hills by Adopting Sustainable Maize Based Cropping System- Dr Tul Bahadur Poon	100	45	90	40	60	25	40				20	420.0
P 2 Increasing availability of maize source seed through on-station and community based seed production program in mid hills of Nepal- Anil Pokhrel												
In: Dailekh and Kalikot; on station B S and FS seed production of Arun-1, Deuti, Poshilo Makai-1 Mana- 5 and Mana 3, and CBSP in 65 ha of land by 7 groups	140	78	75	15	200		180				15	703.0
P 3 Promotion and dissemination of high yielding maize varieties in mid and far western hills of Nepal through IRD, FAT and PVS- Anil Pokhrel												
In: Dailekh, Kalikot, Achham and Bajhang; IRD=400, FAT= 400 and PVS=8 sets with baby trial, focus for DAGs	155	65	38	6	98						15	377.0
Total	395	188	203	61	358	25	220	0	0	0	50	1,500.0

6.7 Budget breakdown for ARS, Kapurkot

Activity	4100	4110	4120	4140	4160	4230	Total (NRs 000)
	TA/DA	Vehicle fuel	Wages	Farm suppl	Training	Stationary	
P1 Increasing the maize production through selection of high yielding varieties and seed production in mid -western hills of Nepal (R Basnet); M/B Trials- 2 sets (CBSP- 6 ha (2 ha QPM and 4 ha others); On- station FS production (2 t); IRD- 100-140 sets)							
Total	120.0	45.0	90.0	60.0	70.0	15.0	400.0

6.8 Budget breakdown for ABD- Khumaltar

Project	4100	4110	4120	4140	4160	4230	4200	4152	Total (NRs ' 000)
	TA/DA	Vehicle fuel	Wages	Farm suppl	Training	Stationary	Rent	Publication	
P1. On farm Source Seed (B.S.+F.S.) Production and Varietal Maintenance of Deuti and Manakamana-4 (0.5 t BS and 5.5 t FS of both variety; 2 varieties maintained and improved)									
Budget	50	30	440	180	30	10		10	750
P2. Development of GLS Tolerant Maize syanthetic populations for GLS epidemic environments of Nepal- Narayan Bahadur Dharmi (GLS resistant materials screened and tested)									
Budget	60		85	50	30	5	15	5	250
Total	110	30	525	230	60	15	15	15	1000

6.9 Budget breakdown for ARS, Surkhet

SN	4100	4110	4120	4130	4140	4150	4160	4230	4200	4152	Total (NRs 000)
	TA/DA	Vehicle fuel	Wages	Lab/Res supply	Farm supply	Books/ Publication	Training	Stationery	Rent	Publication	
P1	Enhancing Maize productivity through improved agronomic management in the western hills of Nepal- BB Pokharel (Appropriate plant population identified; weed management technology validated; Drought and low N tolereant genotypes identified; effect of sunhemp and Dhaincha studied)										
	40.0	20.0	200.0	20.0	100.0	20.0	10.0	10.0			420.0
P2	Increasing Food and Nutritional Security in hilly region of Surkhet district by Developing Quality Protein Maize (QPM) Village through Community Based Production- Janak Dhakal (Site selection-3 VDCs, CBSP CBSP- 20 ha, CBSP Group- 3, Seed marketing 20 Mt)										
	210.0	60.0	90.0	60.0	170.0	45.0	160.0	30.0			825.0
P3	On-Station Source Seed Production of Different Maize Varieties- BB Pokharel (Breeder and Foundations seed of Deuti, Sitala, Mana-3 and Posilo Makai-1 produced in 10 ha marketed at least 21 t)										
	60.0	40.0	300.0	40.0	300.0	15.0		16.0			771.0
Total	310.0	120.0	590.0	120.0	570.0	80.0	170.0	56.0	-	-	2,016.0

6.10 Budget breakdown for ARS, Doti

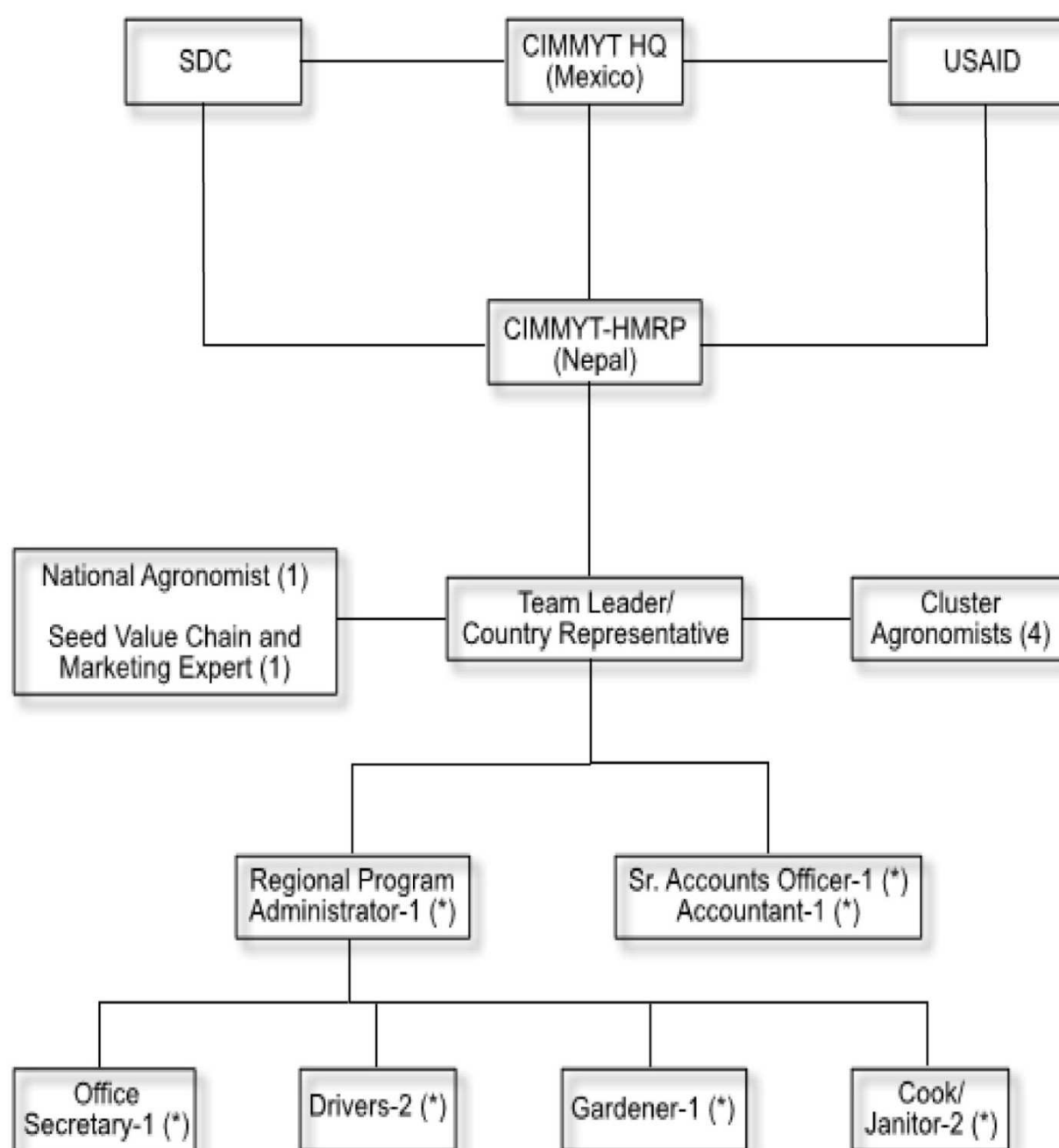
SN	Project Title	4100	4110	4120	4130	4140	4160	4200	4220	4230	Total (NRs,000)
		TA/DA	Vehicle/fuel	Wages	Lab/res supply	Farm supply	Training	Rent/serv	vehi Rep.	Stationery	
P1	Improving Livelihoods of far western hill people through increasing production of maize by assuring their access to improved technologies of maize and on-sation source seed production-HK Prasai (On-station source seed production- 2.5 ha, CBSP- 9ha; PVS- 6, IRD/FAT- 300 sets; Mix cropping of maize with upland rice)	150.0	45.0	55.0	15.0	180.0	150.0	15.0	50.0	10.0	670.0

Annex 7: Summary of project activities and budget for CDD, DOA 2011

SN	Activities	Unit	Budget Line Items									Total Budget for 2011
			Travel cost	Center level monitoring	Supplies and material cost	Farmers' Field level training/ workshop cost	Vehicle rental and/or fuel cost	Consoling services	Support to seed quality control	Allowances for CSP	Reporting/ publication	
1	Conduct CBSP	Ha			3,000,000							3,000,000
2	CBSP group formation/ strengthening	No	200,000			200,000	100,000					500,000
3	Conduct of PVS trials	No			450,000							450,000
4	Conduct of IRDs	No			480,000							480,000
5	Conduct of Intercropping trials/demonstration	No			480,000							480,000
6	Awareness campaign for improved varieties and technologies	No	100,000									100,000
7	District level training to CBSP groups	No				960,000						960,000
8	Training to CBSP groups on seed production	No				216,000						216,000
9	Training to CBSP groups on post harvest handling of seed	No				216,000						216,000
10	Interaction workshop for seed producers and input output traders (marketing)	No				1,200,000						1,200,000
11	Farmers' observation tour	No	700,000									700,000
12	Monitoring and evaluation											
	Central level	L.S.		600,000			362,000					962,000
	Regional level	L.S.	250,000									250,000
	District level	L.S.	1,000,000				200,000					1,200,000
13	Seed quality control and certification	L.S.							1,400,000			1,400,000
14	Media support	L.S.						565,000				565,000
15	Final Reporting	No									105,000	105,000
16	Office material cost	No			300,882							300,882
	Total		2,250,000	600,000	4,710,882	2,792,000	662,000	565,000	1,400,000	400,000	105,000	13,484,882

Note: Budget for the consultant services will be used to hire consultants to revise and develop policy guidelines to integrate DISSPRO and CBSP and integrate PVS and IRD approaches in

Annex 8: Organizational Chart



(*) = Partial support from HMRP