

HMRP-IV: Outcome Level Logical Framework

Goal	Objectively verifiable Indicators	Sources of verification	Assumptions and Risks
Farm HHs in the hills of Nepal, especially of poor and disadvantaged groups have improved food security ¹ and incomes	<ul style="list-style-type: none"> - 50% HHs increased food security through multiple agriculture-based livelihood options - the proportion of malnourished children and women both reduced by 15% - 10,000 poor and small holders (60% DAG) increased their income due to adoption of new and profitable maize varieties and production technologies 	<ul style="list-style-type: none"> - Central Bureau of statistics, - MoAC statistical report, - TYIP review report - DoA and DADOs reports - Maize production statistics from participating hill DADOs - DDC reports - Impact study on income as well nutritional value of QPM in farmers' diet. 	<ul style="list-style-type: none"> - Socio-political circumstances in Nepal allow smooth implementation of activities in the rural hills - New Constitution approved and government plan comes on time - Biotic (diseases and pests outbreak) and abiotic stresses (extreme precipitation events and associated calamities) will not occur - Cooperators provide full supports and cooperation
A. Hill maize farmers, especially from poor and disadvantaged groups, adopt new and profitable maize varieties and improved technologies ² to enhance productivity and marketing opportunities	<ul style="list-style-type: none"> - NMRP and CBSP meets 30 % of national OPV maize seed demand of 5,086 tons³ - 35,000 poor and disadvantaged HHs used new maize varieties and improved technologies by 2014 - 10,000 HHs adopted maize based intercropping practices by 2014 - At least 50% women and 50% disadvantaged represented in CBSPs and 60 % women and 70 % DAGs participated in participatory research and extension activities 	<ul style="list-style-type: none"> - Reports of HMRP partner institutions (ie. NGOs, CBOs, etc) and field observation - Field survey and partner report. - DoA/DADOs reports, NGO's report and HMRP surveys - External reviewers reports and joint monitoring and observation reports - FFA Reports 	<ul style="list-style-type: none"> - Effective and functional partners exist in hill regions/districts - Framers prefer OPVs and government policy favor use of OPVs in the hills instead of F1 hybrid - Personnel engaged in HMRP activities are trained and committed to work with multi-cultural groups of farmers in the remote hills - PVSPR and HMRP synergize on participatory activities - Respect Basic Operating Guidelines

¹ FAO or DFID definition of food security

² technologies refer to improved resource conserving technologies mainly legume and vegetable intercropping, plant population management, plant protection, composting techniques, and use of energy-time saving equipments such as hand-corn-Shell, Jab planter etc.

³ Value indicates theoretical demand for approximately 203,437 ha (33 % of total maize- 616476 ha in the hills) land in the mid-hills to achieve ideal Seed Replacement Rate (SRR) of 33 %

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B. National Seed Board (NSB), NARC and DoA enforce quality control through both public and private institutions	<ul style="list-style-type: none"> - Revised seed policies and regulations on truthful labeling are available in 2011 - 200 NARC breeders, DoA agriculturists and private sector experts (at least 50 women) received Seed certification licenses by 2014 - 2,500 seed producers received seed certification services from inspectors⁴ annually - 4 new maize varieties are released and ready for production through CBSPs - 1500 ha. of CBSP maize seed field inspected by authorized license holders - CBSP/cooperative receive better price with truthful label 	<ul style="list-style-type: none"> - Nepal gazette, reports of NARC and DoA (monitoring, training, half-yearly, yearly, etc.) - Seed policy reports from NSB/SQCC/CDD - NARC research and development proposals to reflect GESI as a strong component - Policy/Guidelines - Baseline data from respective DADOs 	(BOG)

⁴ Including non- traditional inspectors such as NARC breeders, DoA agriculturists and private sector experts including NGOs

HMRP-IV: Output Level Logical Framework under Outcome A

Outputs	Objectively verifiable indicators	Sources of verification	Assumptions and Risks
A.1 CBSP Groups know and use available varieties and technologies	<ul style="list-style-type: none"> - 1000 tons of new and profitable maize variety seed produced and distributed by CBSP groups annually - At least 11000 (33 %) HHs produce QPM maize variety by 2014 - At least five types of maize based profitable intercropping technologies are available for farmers - At least 3 crop management technologies developed and validated annually 	<ul style="list-style-type: none"> - HMRP trip reports - DADOs under DoA, NARC, and other SGP partners' annual programme, half yearly and annual reports - Baseline data from respective DADOs - Reports of other partners 	<ul style="list-style-type: none"> - Country's economic and bureaucratic environment enable institutional linkages between government and non-government institutions and it is maintained and strengthened - DADOs comply the directives from DoA - Transfer of trained DoA, NARC and NGOs staff remains at a minimum level
A.2 Poor and disadvantaged households have increased access to quality maize seed and proven technologies	<ul style="list-style-type: none"> - New maize technologies sufficiently outperformed traditional technologies in on-farm verification trials and liked by farmers - Enough seed of farmers' preferred varieties is available on time at the right place - Established seed groups/Cooperatives and marketing network sufficiently are recognized by the government - Qualified CBSP/Cooperatives partners get sufficient amount of source seed from relevant sources 	<ul style="list-style-type: none"> - Annual programmes and reports of DADOs/DoA/CDD/NARC - Baseline data from respective DADOs and NARC - External reviewers report - Annual Program of NARC and DoA line agencies 	<ul style="list-style-type: none"> - Implementer, institution head and policy makers internalize the importance of GESI consideration
A.3 CBS groups/Cooperatives supply quality seeds at competitive market price	<ul style="list-style-type: none"> - 1,000 tons of quality maize seed produced by CBSP groups annually - At least 40 CBSP/Cooperatives have contracts with local seed traders 	<ul style="list-style-type: none"> - Respective DADOs and NARC Reports (Annual/half-yearly) - SGPs (NGOs) reports 	
A.4 Poor and disadvantaged maize producing HHs have access to multiple agricultural interventions for enhanced productivity	<ul style="list-style-type: none"> - At least 3,000 HHs increase cropping intensity in Swiss cluster districts - At least 1000 farmers practice maize and vegetables seed production - At least 30,000 HHs of the Home Garden beneficiaries are harvesting Quality Protein Maize (QPM) 	<ul style="list-style-type: none"> - Respective DADOs and NARC Reports (Annual/half-yearly) - HMRP partners field monitoring and observations - HMRP trip reports - SGPs (NGOs) reports - External Impact Assessment report 	<ul style="list-style-type: none"> - SDC's vision of connected local development and project synergies are respected by all SDC partners at least in the SDC cluster districts

HMRP- IV: Output Logical Framework under Outcome B

Outputs	Objectively verifiable Indicators	Sources of verification	Assumptions and Risks
B.1 National Seed Board (NSB), NARC, DoA allow decentralized source seed production system	<ul style="list-style-type: none"> - NARC/NSB issued directives and procedures for decentralized truthfully labeled source seed production - NARC sufficient quantity of BS and 20 tons of FS source seed through hill ARS stations (Surkhet, Lumle, Kabre and Pakhribas) and NMRP annually for CBSP - NARC R/ARS stations maintain at least 10 farmers' preferred varieties - CBSP and DISSPRO operate under the same production guidelines by 2014 	<ul style="list-style-type: none"> - Nepal gazette, NSB and NARC reports of released and registered list - Variety release proposals submitted to NSB/variety release committee - Seed production data of R/ARSs 	<ul style="list-style-type: none"> - Environment enables to change policy constraints on variety release seed production and GESI integration in the national mainstream for agriculture research and development - Transfer of trained DoA and NARC staff remains at a minimum level.
B.2 Public and private institutions obtain seed inspection mandate and license	<ul style="list-style-type: none"> - Trained 200 NARC breeders, SMS of DADOs and Private sector experts (at least 50 women and 10 from private sector) authorised for field inspection, sampling and seed testing - 5 NARC research stations and 10 CBSP including private seed company initiated production of truthful ly labeled source seed by June 2012 - 	<ul style="list-style-type: none"> - Variety release proposals submitted to NSB/variety release committee - NSB, CDD and R/ARSs in the hills half-yearly and annual reports - NARC outreach technology verification proposals 	
B.3 CBSP/cooperatives manage supply of quality seed	<ul style="list-style-type: none"> - Training modules and trainers manual on truthful labeling is available and followed by CBSP groups and cooperatives by 2012 - 5,000 kg of Foundation Seed of farmers preferred varieties produced by NARC and DoA in their respective regional farms annually - 50 CBSP groups have developed their internal seed quality control system for truthful labeling by 2014 - 40 CBSP groups have seed related minimum infrastructure by 2014 	<ul style="list-style-type: none"> - Training completion report - Policy document of MoAC - External Impact Assessment report 	
B.4 NSB and NARC consider HMRP's experience in variety development, certification and release system	<ul style="list-style-type: none"> - 4 varieties, including one QPM developed and released by NARC and other partners by 2014 - DoA and NARC consider gender marker while granting project for varietal trials - DoA and NARC include gender as an important criteria while doing Farmer's Assessment Test (FAT) 	-	