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OPPORTUNITIES IN POPULATION AND HEALTH FOR COMMUNITY FOREST USER GROUPS IN NEPAL

JULY 2006

EH IQC

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PREFACE

The assessment was conducted by a four-person team from ARD, Inc. over a three-week period in June and July 2006. The members of the team with their areas of relevant expertise are as follows:

- Jim Schweithelm, Ph.D., Team Leader – Biodiversity Conservation, Livelihoods, Natural Resource Conflict;
- Keshav Kanel, Ph.D., Community Forestry and Natural Resource Governance;
- Leona D'Agnes, B.S., Family Planning and Population-Health-Environment (PHE); and
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Leona D'Agnes is the principal author of this report. We would like to thank the following staff of the USAID/Nepal mission for their support and guidance before, during, and after the assessment: Naren Chanmugam, Sheila Lutjens, John Quinley, Bigyan Acharya, and Netra Sharma Sapkota. We are also indebted to the SAGUN project staff from CARE/Nepal, WWF/Nepal, and RIMS for helping us to understand what they have learned in implementing the project. We also thank the SAGUN team for making arrangements for our field visits and providing knowledgeable and enthusiastic field staff to accompany us. Finally, we owe a large debt of gratitude to the users groups who patiently answered our questions and in some cases traveled many hours on foot to talk with us. They provided the most important input to our assessment.

Cover Photo: Members of a community forest user group (CFUG) consulted during the PHE assessment in Banke District, Nepal. Over half of the people in this forest community are children and youth. Photo provided courtesy of Leona D'Agnes, July 2006.

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The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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ACRONYMS

ADRA	Adventist Development and Relief Agency
ASRH	Adolescent Sexual and Reproductive Health
BZ	Buffer Zone
BZUG	Buffer Zone User Group
CBD	Community-Based Distribution
CBFP	Community-Based Family Planning
CDM	Camp, Dresser and McKee
CF	Community Forestry
CFUG	Community Forest User Group
CSO	Civil Society Organization
DFID	Department for International Development
DMPA	Depot Medroxyprogesterone Acetate (a hormonal contraceptive method)
DOF	Department of Forests
DOH	Department of Health Services
EC	Emergency Conception
ECP	Emergency Contraceptive Pill
ESCP	Environmental Security and Exchange Program
FCHV	Female Community Health Volunteer
FECOFUN	Federation of Community Forest Users Nepal
FGD	Focus Group Discussion
FHI	Family Health International
FP	Family Planning
ICS	Improved Cooking Stove
IEC	Information, Education and Communication
IPOPCORM	Integrated Population and Coastal Resource Management Project
INGO	International Nongovernmental Organization
IUD	Intra-Uterine Device
km^2	square kilometers
LFP	Livelihood and Forestry Programme
LRP	Local Resource Person
M&E	Monitoring and Evaluation
NGO	Nongovernmental Organization
NRM	Natural Resource Management
OPH-CFUG	Opportunities in Population and Health for Community Forest User Groups
P-H	Population-Health
PHE	Population, Health and Environment
PWBR	Participatory Well-Being Ranking
SAGUN	Strengthening Activities for Government in Utilization of Natural Resources
SDC	Swiss Development and Cooperation Agency
SLA	Sustainable Livelihood Approach

SNV	Netherlands Development Agency
TAL	Terai Arc Landscape Project
TMI	The Mountain Institute
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development
VDC	Village Development Committee
VHW	Village Health Worker
WATCH	Women Acting Together for Change
WIN	Winrock International Nepal
WHO	World Health Organization
WWF	World Wildlife Fund
YAPU	Youth Anti-Poaching Unit

1.0 EXECUTIVE SUMMARY

LEONA D'AGNES, ARD, INC., JULY 2006

Traditional welcoming ceremony performed by youth in a Tharu community in the Terai region of Nepal. Never before have there been so many young people entering the reproductive age group in Nepal. The country's high rate of population growth and momentum pose serious challenges to environmental security, sustainable development and post-conflict rebuilding that can best be addressed through cross-sectoral PHE approaches that generate synergy and are more acceptable to local communities.

Integrated approaches to population, health and environment (PHE) are programmatically efficient and yield better results than single sector programs. Moreover, they are more in tune with the way rural people lead their lives in developing countries and, as such, are more acceptable to the community. Nepal presents a unique opportunity to work with and through existing Community Forest User Groups (CFUGs) and their federations to model PHE approaches that could improve human and ecosystem health, and generate impact on post-conflict building outcomes. USAID's ongoing assistance to CFUGs has strengthened the management of Nepal's forest resources in a democratic way and expanded access to and control over resources by the poor and other vulnerable and socially excluded groups living in forests and fragile buffer zones. The recommended PHE initiatives will further build CFUGs' capacity to disseminate reproductive health and alternative energy technologies (e.g., improved cooking stoves, biogas digesters) in a holistic manner and in tandem with other sustainable livelihood approaches (SLAs). Opportunities for young (ages 15-24) people to participate in community forest governance, protected area management, biodiversity conservation and health will be maximized through the same efforts. With over 14,000 CFUG and federations operating nationwide, the potentials for a rapid scale-up of PHE approaches (on a district or corridor or landscape-wide basis) are promising and unique to the developing world.

2.0 BACKGROUND

Community Forest User Groups and their federations[1] rank among the most important and pervasive civil society organizations (CSOs) in Nepal. Over 14,000 groups currently operate nationwide and their membership encompasses a third of the country's population. CFUGs are mainly concerned with the management of forest resources turned over to them by the Department of Forestry under renewable five-year tenurial arrangements. Recent experience working with CFUGs under the USAID-assisted Strengthening Actions for Governance in Utilization of Natural Resources (SAGUN) project shows that "community forest (CF) management can be effectively carried out in local areas severely affected by conflict and violence, provided that such programs directly concern people's livelihoods, access to information and rights of the communities and there is a high degree of accountability and transparency in financial and other resource management.[2]"

Increasingly, CFUGs are beginning to address other issues raised by their members that go beyond forests (i.e., lack of education and health services, poor roads, etc.). In the process, CFUGs are learning that peoples' participation in forestry management work increases as their needs are addressed. Several of Nepal's so called "second generation" CF projects now incorporate SLAs that enable CFUG leaders to better understand and respond to their constituents, particularly the poor who depend largely on natural resource extraction for sustenance and livelihood. In the SLA context, a livelihood is more than just a person's job or way to earn a living; it is all things necessary for a means of living, including health. As such, the SLA framework presents a mechanism for linking community forestry management with other sectoral management strategies such as reproductive health management and alternative energy.

A team commissioned by USAID reviewed the experience of the SAGUN program in the field and identified gaps, opportunities, lessons and best practices to inform the design of pilot PHE initiatives that could potentially impact human and forest health as well as democracy outcomes in Nepal. The PHE assessment team members met with Ministry of Health personnel at central and district levels, and with CFUG executives and members who participated in focus group discussion (FGD) organized in the Terai and Hill Districts. The same team members also participated in informant interviews with representatives of FECOFUN (national federation of CFUGs), donor agencies and international nongovernmental organizations (INGOs) involved in SAGUN and with other INGOs and local NGOs involved in ongoing natural resource management (NRM) and community forestry projects in Nepal.[3] A desk review was also conducted to glean additional insights and lessons from past projects in Nepal concerned with CF and livelihood, women's empowerment and reproductive health,[4] as well as PHE projects operating in other developing countries. The following sections of this report focus on the team's finding pertaining to population, health and environment issues and recommendations for PHE programming in Nepal. For

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1 FECOFUN is the largest federation with a membership that currently stands at about five million people including rural-based farmers and traditional users of forest resources from almost all of Nepal's 75 districts. FECOFUN is also Nepal's largest civil society organization (CSO).

2 CARE Nepal. 22 June 2006. Overview of SAGUN Program, major achievements, critical issues, key lessons learned and broader vision. PowerPoint presentation.

3 See Attachment A List of NGOs involved in Community Forest/NRM Projects in Nepal.

4 See Attachment B: Analysis of the Situation Relevant to PHE in Nepal.

lessons, best practices and recommendations pertaining to biodiversity conservation, governance and forest management issues, please refer to the team's final report to USAID/Nepal on the SAGUN assessment.[5]

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Members of a community forest user group (CFUG) in Banke District (left) and a women's user group in the buffer zone of Bardia National Park (right) in the Terai (lowland) region of Nepal. Since the inception of the USAID-funded Strengthening Actions for Governance in Utilization of Natural Resources (SAGUN) Program in 2002, the number of women and Dalit in key Executive Committee positions of BZUGs and CFUGs has doubled resulting in more accountability to the user groups and their functions.

[5] ARD, Inc. July 2006. Nepal User Group Natural Resource Management/Population, Health, and Environment Assessment: Final Report.

3.0 ASSESSMENT FINDINGS RELATED TO HEALTH AND FAMILY PLANNING

Although health improvement is not a stated goal of SAGUN, CARE and other SAGUN partner NGOs have been working with CFUGs to introduce health interventions that can reduce morbidity and mortality and improve family livelihood, such as primary health care and improved cooking stoves (ICS) that reduce indoor pollution and demand for fuel wood. Comparable progress, however, is not evident in the case of family planning (FP) interventions, which have not been addressed as vigorously. The NGOs simply facilitate linkages between CFUGs and peripheral health clinics at district and village development committee (VDC) levels but their efforts have not been sufficient to bridge unmet FP needs in remote communities—let alone generate new demand for FP interventions that can also help to reduce high rates of maternal and infant mortality found in rural Nepal. While most women are aware of the presence of government-trained Female Community Health Volunteers (FCHVs) in their communities, the volunteers have not been particularly successful in promoting family planning use or dispelling common misconceptions that discourage couples from using contraceptive technology. Even though FP falls under the purview of primary health care, and FCHVs are empowered by the Department of Health Services (DOH) to promote and distribute temporary methods of family planning (condoms and oral contraceptives), many are not actively working to advance FP practice in rural areas. Moreover, the methods they have to offer are not very popular among rural couples, although more could certainly be done to increase their acceptability and use. One method rapidly gaining popularity is the injectable hormone DMPA (Depot Medroxyprogesterone Acetate). During team site visits to the Mid-Hill and Terai forests, women talked about having to walk two to three hours to reach a health post for their next DMPA injection—only to find it was closed. The women themselves asked why it is that FCHVs are not allowed to deliver DMPA in the community.

Evidence from Uganda and other countries point to the feasibility and advantages of using non-medical personnel to deliver DMPA in resource scarce settings.[6] It is unlikely that such responsibility will be devolved to FCHVs in the near future (although they are allowed to administer lifesaving oral antibiotics to children as treatment for uncomplicated pneumonia). The lowest level government health personnel presently authorized to administer DMPA is the village health worker (VHW). An evaluation conducted by Family Health International (FHI) in 2002 demonstrated that VHWs in Nepal could safely administer DMPA if appropriately trained and equipped with a simple checklist to screen and identify at-risk candidates that do not meet the World Health Organization (WHO) criteria for safe use of DMPA.[7] A similar study could be undertaken to assess whether FCHVs could safely use the same checklist.

Another concern voiced by women during the site visits was the negligent behavior of some government health workers who prioritize their private practices over their public health duties, leaving outreach clinics

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[6] FHI/SAVE. June 2005. Final Report on Safety and Feasibility of Community-Based Distribution of Depo Provera in Nakasongola, Uganda.

[7] FHI. 2002. Evaluation of a Checklist for Nepalese Village Health Workers to Screen Women for Injectable Contraception. Research to Practice Initiative. rtop@fhi.org.

unmanned during routine work hours. The rights base approach, which some NGOs use to pressure government units to improve service delivery performance, is an approach that CFUGs could apply for similar purposes. Lessons from an ongoing community-based family planning (CBFP) pilot supported under USAID's Flexible Funding Program, however, point to the success of another approach in which a local NGO serves as the intermediary between the community and local government to facilitate dialogue and joint action leading to improved access and quality of FP serviced to marginalized groups in four districts in the Terai zone.[8] FECOFUN, the largest federation of forest users in the country, has personnel that work at national, regional, district and VDC levels to advocate for CFUG rights. Several local FECOFUN personnel participated in the FGD sessions organized for this assessment and expressed their support for integration of reproductive health activities into CFUG programs. FECOFUN personnel at VDC and/or district levels could serve as intermediaries between user groups and government health personnel in health posts, outreach clinics and health facilities at the district level.

Also, there is no reason why indigenous leaders of CFUGs and Women/Dalit groups could not be trained and empowered to use interpersonal communications channels and peer education approaches to dispel common misconceptions about contraceptives and encourage FP practice among their members. As a backup family planning method, they could also educate women about emergency contraception (EC), which is not presently available in the forest communities and buffer zones visited. Unintended pregnancy is a common problem among women whose husbands are seasonal laborers and require them to discontinue use of temporary methods while they are away working. Peer education could be applied to increase women's awareness and correct use of EC technology. In the event that prepackaged emergency contraceptive pills (ECPs) are not readily available, women can be trained to cut up strips of oral contraceptive pills and assemble them with illustrated written instructions to assure correction administration.

The high cost of drugs in medicine shops was another complaint frequently expressed by CFUG members during focus group discussions. One CFUG even asked if the project could assist them to establish a mechanism for stocking and selling essential drugs and veterinary medicine supplies in the community. External training support would be needed to build the capacity of individuals selected by CFUGs to distribute contraceptives and EC but this would *not* entail major investments in time or training inputs. Evidence from Thailand, the Philippines and other countries show ordinary shopkeepers—with less than two days of training in community-based distribution (CBD) of contraceptives, can become effective service providers. Nor would the project have to finance commodity procurements as CFUGs have their own group funds (generated from forestry assets) that could be used for such purpose. Annually, CFUGs earmark between 25%-30% of their group funds for community development, including health activities. In most cases, however, CFUG leaders prefer to invest group funds in infrastructure (e.g., construction of health posts, latrines, and water supply systems) and curative health rather than prevention. At present, there is no concerted effort to educate CFUG leaders about the cost-effectiveness of FP or to encourage them to finance mechanisms that could increase demand and access to modern methods at the level of the community.

3.1 OTHER HEALTH ISSUES, GAPS AND OPPORTUNITIES IN SAGUN SITES

Several village men who participated in FGDs with the assessment team mentioned they would also like to gain access to literacy training courses offered to women under the SAGUN project. One of the implementing partners, FECOFUN, already opens its courses to men because (according to them) "women's problems always come through men." FECOFUN is also the recipient of a grant from the United Nations Population Fund (UNFPA) that supports health information dissemination through literacy training courses.

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[8] Whitney, E. May 2006. PowerPoint Presentation. "Health Communication Partnership (2006). Reaching Marginalized Groups: Towards Social Inclusion in Nepal. Community-based Family Planning: Strategies and Approaches." Target areas include four districts in the Terai (Dhanusha, Siraha, Sunsari and Banke). One of these districts (Banke) is also a target area where CARE is working under SAGUN and WWF is working under the Terai Arc Landscape (TAL) project to strengthen CFUG capacity in forest management, governance and livelihood.

A similar approach could be used to rapidly disseminate family planning and PHE messages and concepts to CFUG members, particularly messages to dispel the common belief that contraceptive use can impair one's physical strength. CARE took the lead in developing the governance literacy training materials used by the partners in SAGUN. Other INGOs that operate non-formal literacy training programs in Nepal and have worked with USAID on other programs include World Education International and the Adventist Development and Relief Agency (ADRA). The latter has both non-formal education and community-based FP programs in Nepal and has developed functional literacy training modules for FP that could possibly be adapted for use by SAGUN partners.

Whereas SAGUN has worked effectively to empower women and other disadvantaged groups in community forest management and CFUG leadership, equivalent emphasis on expanding the involvement of youth in CFUG governance or building the capacity of the next generation to better manage Nepal's natural resources was not evident in the SAGUN project or other CF projects reviewed by the assessment team. One exception is World Wildlife Fund (WWF)/Nepal's projects that work in buffer zones of protected areas, where Buffer Zone User Groups (BZUGs) are encouraged to organize Youth Anti-Poaching Units (YAPUs) to assist with patrolling and other protected area management efforts. Given that half of the Nepalese are under the age of 20 and the Maoist's success in recruiting restless youth into the movement, and recent evidence suggesting strong association between "youth bulge" and insurgency in least developed countries,[9] it would seem appropriate and timely to create more opportunities to engage young people in environmental protection, NRM management and sustainable livelihood activities in rural Nepal.

YAPU represent a possible entry point for integrating adolescent sexual and reproductive health (ASRH) interventions into ongoing CF programs, such as WWF's which already incorporates and monitors SLAs. ASRH targeted to young people entering the reproductive age group is urgently needed to slow down Nepal's high population growth rate (2.3% per annum), and experience from other PHE projects worldwide indicate impact can be generated in a relatively short period of time (less than 36 months). In the Philippines, for example, young (ages 15-24) males and females in fishing communities are mobilized and empowered to guard marine protected areas and deliver behavior change communication messages to their peers through interpersonal channels. They also organize local information, education and communication (IEC) campaigns that disseminate information about PHE linkages and encourage young people to become "stewards" of the coastal environment and their sexuality. Results of ongoing operations research indicate the approach contributed to a significant reduction in youth fertility and illegal fishing practices during 2001-2004.[10]

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[9] Staveteig. 2005. "The Young and the Restless: Population Age Structure and Civil War." Environmental Security and Exchange Program (ESCP) Report Issue 11.

[10] Castro, J. D'Agnes, L. and C Aquino. 2005. Mainstreaming Reproductive Health into Coastal Resource Management Agendas for Improved Food Security: The Experience of the IPOPCORM Project in the Philippines. PATH Foundation Philippines Inc. website (www.pfpi.org).

4.0 LESSONS LEARNED, BEST PRACTICES AND RECOMMENDATIONS

4.1 SAGUN AND OTHER NEPALESE PROJECTS

1. **Lesson**: In the developing world, indoor air pollution from fuels such as wood and dung is a leading cause of death for children under five and the fourth leading cause of premature death for women. Results of Nepal's National Improved Cooking Stove (ICS) program indicate ICSs generate multiple impacts and can be disseminated with little or no subsidy to end users. Although ICSs generate multiple paybacks, the health benefits to women and children should be the primary focus of ICS promotion efforts followed by other benefits (i.e., fuel efficient, save time spent collecting wood, reduce forest/species loss). See Attachment B for other lessons learned from ICS studies/programs in Nepal.

    - **Recommendation**: NGO efforts to disseminate ICS using community-based approaches (i.e., RIMS Dhading) should be expanded and the same NGOs should be encouraged to explore and test ways in which FP could also be promoted through the same channels and information dissemination mechanisms. NGOs should also be encouraged to integrate appropriate measurements in their monitoring and evaluation (M&E) systems and tools to track whether the ICS are actually used and contribute to better health among women, children and other household members (i.e., reduce signs and symptoms of respiratory disease, etc.).

2. **Best Practice**: "Dependency is not empowering;" programs should "promote women's ability to teach themselves the skills they need to improve their lives at costs they themselves can afford."

    - **Recommendation**: Community-based family planning is an enabling approach that applies peer education, guided group interaction and CBD methods to teach women and couples the skills they need to better achieve their reproductive goals and desired family size. CFUGs should be encouraged to develop CBFP activities to address unmet FP needs of their members. The focus should not only be on women but men and youth (ages 15-24) should also be targeted with behavior change communication and IEC about FP and adolescent reproductive health.

3. **Lesson**: The livelihoods approach encompasses best practices from a range of disciplines and development experiences. In the context of a sustainable livelihood approach, a livelihood is more than just a person's job or a way to earn a living; it is all things necessary for a means to living. A livelihood has been defined as comprising "the capabilities, assets (including both material and social resources) and activities required for a means of living." A livelihood is sustainable when it can cope with and recover from stress and shocks and maintain or enhance its capabilities and assets, both now and in the future, while not undermining the natural resource base (DFID:1999).

    - **Recommendation**: SLA is a logical framework to context PHE. CF projects that already use SLAs and have appropriate M&E systems should be given priority consideration for PHE piloting.

4. **Best Practice:** Governance literacy training is empowering CFUGs and Women/Dalit groups to raise issues of concern that go beyond forests and often relate to health. Other ongoing efforts, such as UNFPA's Sustainable Development Initiative, are supporting FECOFUN and other federations to integrate reproductive health messages into their literacy training programs for men and women.

    - **Recommendation:** Literacy training courses represent an existing mechanism that USAID could tap for rapid dissemination of FP and ARSH information and education to CFUG members throughout the country. The focus should be on dispelling common misconceptions about contraceptives and promoting FP and responsible sexual behavior for improved livelihoods. World Education International and ADRA, two INGOs with an established presence in Nepal, predominate capability in non-formal education and CBFP know-how.

5. **Best Practice:** CFUGs are required by the Department of Forests (DOF) to revise their operational plans every five years. Modifications to operation plans that were facilitated under SAGUN and other CF projects incorporate good governance perspectives and SLAs so as to improve transparency, accountability and equity within their institutions, and to better respond to concerns of the community that go beyond forests.

    - **Recommendation:** Incorporation of population and health perspectives into the CF operational planning (OP) processes could generate information needed to increase CFUG's awareness of population and environment issues leading to local action that brings about better balance between human and natural resources in fragile ecosystems. Similarly, the incorporation of population and health indicators in existing Participatory Well-Being Ranking (PWBR) tools and methods could generate information needed to convince CFUG leaders to invest more of the group's funds in preventive health interventions. Selected NGOs with ongoing CF projects that have secure funding until 2007 (at a minimum) should be encouraged and supported to work with CFUGs to incorporate PHE into PWBR and OP processes, particularly in densely populated CF buffer zones in the Terai.

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In the developing world, indoor air pollution from biomass fuels (wood, dung) is a leading cause of death for children under age five and the fourth leading cause of premature death for women. Alternative energy technologies such as smokeless cooking stoves and biogas digesters improve human and ecosystem health by reducing indoor air pollution (and related health risks) and by reducing demand for fuel wood. The photos above show a Tharu woman and infant who live in a house with a backyard biogas digester that generates fuel for cooking.

6. **Lesson:** Local resource persons (LRPs) capacitated under SAGUN have demonstrated capacity to catalyze important social changes and improvements in gender relationships, social inclusion and empowerment. Much of their learning took place during cross-site visit activities that exposed LRPs to

other SAGUN subprojects and expanded their vision and ambition to promote good governance and SLAs. As a result, one LRP reported that he dropped some bad habits (drinking, womanizing) and became more active in CFUG and community development work. During the same study tour, he learned about a travel subsidy scheme that enables women living in remote areas to access sterilization services at district health facilities. Upon returning to his community, the LRP successfully persuaded other CFUG leaders to allocate group funds to create a similar subsidy, of which one woman has already availed.

- **Recommendation:** Support opportunities for experiential learning through cross-site visits for selected CFUG leaders, LRPs and women motivators to enhance their awareness and understanding of the benefits of community-based family planning and their skills to facilitate the development and integration of CBFP activities in CF projects.

7. **Best Practice**: Facilitating dialogue and joint planning between communities and government health personnel can overcome obstacles and create a more conducive environment for couples to adopt FP practices. Rights-based approaches can also exert pressure to improve performance and may be indicated in some instances.

    - **Recommendation:** NGOs should facilitate dialogue between local CFUGs and FECOFUN executives and health officers/personnel at VDC and district levels to identify issues and obstacles related to family planning, and to facilitate joint planning and actions to expand availability and use of modern FP methods, including CBD of contraceptives (condoms, pills, ECPs and perhaps even DMPA).

8. **Lesson:** "Cultural diversity is not an historical accident. It is the direct outcome of the people learning to live in harmony with the mountains' extraordinary biological diversity." Institutionalization of traditional health practices and indigenous knowledge of medicinal plant and cultural value of water among the Amchis reportedly helped to improve health services in Upper Dolpa (WWF/SAGUN).

    - **Recommendation:** Where feasible, traditional health institutions and channels should be tapped to promote FP values in the High Mountains and conservation landscapes of the Eastern Himalayas. NGOs working in these areas should be encouraged to explore ways in which FP objectives can be advanced in tandem with the preservation of cultural heritage, spiritual values and the diverse natural resource base.

4.2 PHE PROJECTS WORLDWIDE

Other lessons and best practices gleaned from ongoing PHE projects worldwide supported by USAID, the Packard Foundation and other donors are highlighted below together with suggestions for adaptation in future PHE effort in Nepal:

1. **Lesson:** Poor adolescents are often overlooked by current service delivery modes that rely solely on clinics or schools.

    - **Recommendation:** Alternative strategies, such as community-based outreach programs, are recommended to better serve the needs of poor young women**.**

2. **Best Practice:** Youth IEC campaigns that encourage young people to become "stewards" of the environment and their sexuality are generating significant impact on human health and biodiversity conservation indicators in the Philippines and other countries where young people (ages 15-24) are being mobilized and trained to disseminate population-environment messages among their peers and the community at large (PFPI: 2006). Similarly, ongoing Youth Democracy initiatives in Thailand are helping to empower a new cohort of leaders that use a rights-based approach to promote good governance and to facilitate anticorruption campaigns at local levels (PDA:2006).

- **Recommendation:** Youth Anti-Pouching (YAP) Units spearheaded by CFUGs with assistance from WWF represent existing mechanism that could be used to mobilize young people for democracy and PHE initiatives in rural Nepal. Involve young (ages 15-24) people in the development of an appropriate advocacy communication strategy and testing of key messages and IEC materials that links Population/Health and CF concepts under the broader context of sustainable livelihoods and encourages youth and other members of forest communities "to protect the forest, plan their families and use alternative energy to assure a better future" for themselves and the nation.

3. **Lesson:** Asking communities to conserve biodiversity often requires their foregoing income and products from the forest or its conversion to agriculture; assistance with health, therefore, provides a way to balance such opportunity costs by improving community welfare.[11]

    - **Recommendation:** CFUGs and their federations should be encouraged to undertake community-based family planning activities in conjunction with health and community forestry management in order to enhance the sustainability of the conservation and livelihood gains already realized through their past and ongoing CF work. An initial activity that most CFUGs could initiate, with appropriate technical support, is the training of volunteer peer educators that would work under trained LRPs and female motivators to disseminate FP information through interpersonal channels to women, men and youth (ages 15-24) in forest and buffer zone communities.

4. **Lesson:** Integrated population, health and environment (PHE) projects provide value added to environment, conservation and reproductive health efforts.[12]

    - **Recommendation:** Create opportunities for FECOFUN leaders to gain insights on the multiple benefits of integrated approaches and firsthand knowledge on how to facilitate the integration of FP and health interventions into community forest management and governance planning, implementation and monitoring.

5. **Lesson**: With appropriate training and support, environmental NGOs can develop and manage CBFP activities and CBD systems for contraceptives that can create demand for and increase access to modern FP in remote communities[13].

    - **Recommendation**: Support selected NGOs with ongoing CF-health initiatives to test the feasibility of CBD and the willingness of CFUGs to invest group funds for community-based family planning and CBD-related investments (e.g., revolving fund for commodities, travel subsidy for women to access DMPA, IUD and sterilization services).

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[11] Melnyk, M. 2001. Community Health and Conservation: A Review of Projects. Washington, DC. Biodiversity Support Program.

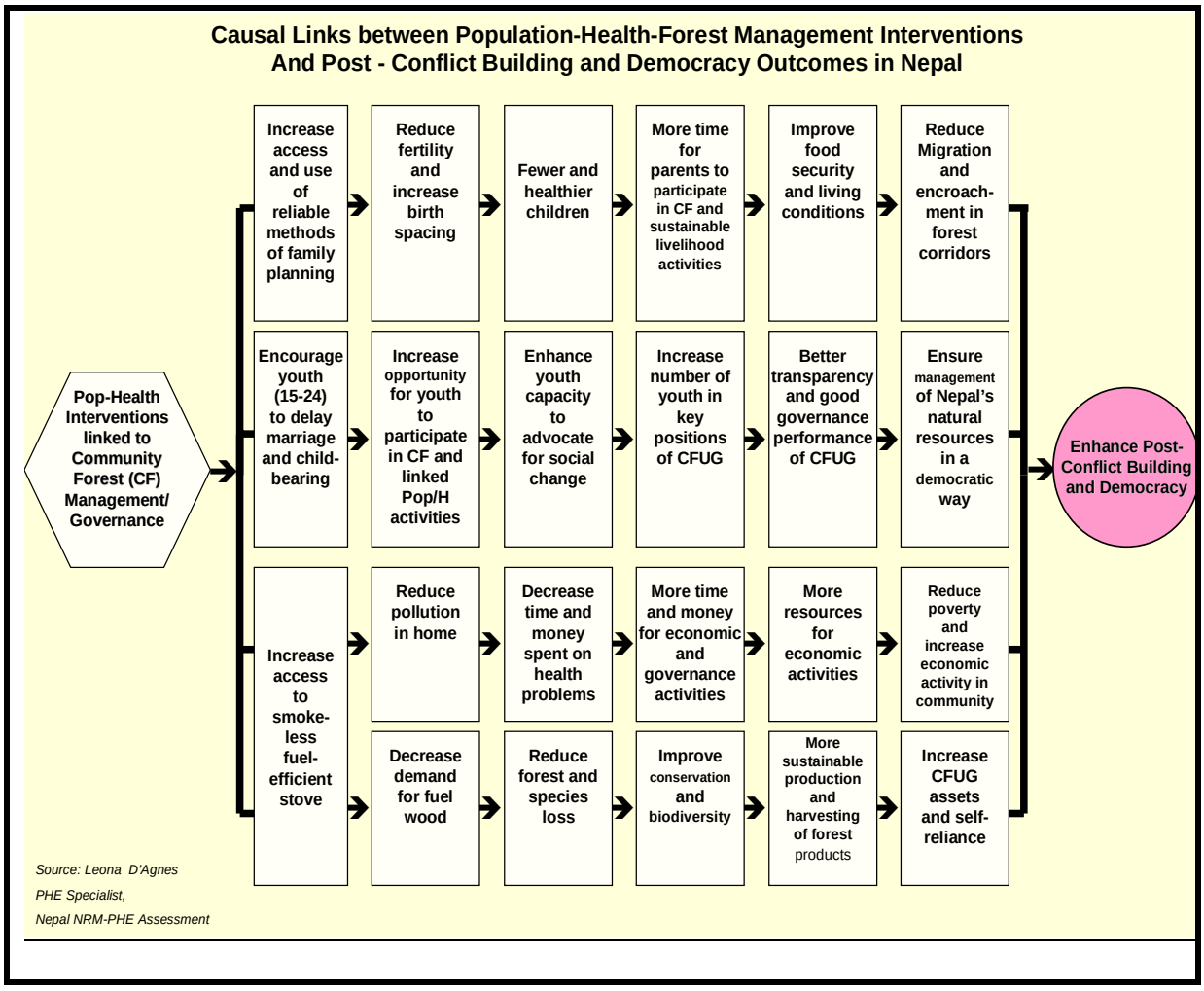
[12] Peilemieier, J. 2005. Review of PHE Projects Supported by the Packard Foundation and USAID.

[13] Herman, C. 2004. Report on the Sucessful Pilots of the Integrated Population and Coastal Resource Management (IPOPCORM) Initiative for Food Security in the Philippines.

5.0 PUTTING IT ALL TOGETHER—PHE LINKAGES AND CAUSAL CHAIN

The causal chain below shows the linkages between population-health (P-H) and forest management/ governance interventions and democracy outcomes in Nepal. It is premised on the assumption that population perspectives and family planning/reproductive health interventions can be integrated into the same operational guidelines and tools that CFUG are using to implement and monitor good governance principles and natural resource management strategies using sustainable livelihood approaches. Given USAID/Nepal's funding limitations for PHE initiatives, the team recommends that priority be allocated to health interventions that have the potential of impacting both human and forest health, such as alternative energy technologies that simultaneously reduce indoor air pollution and demand for fuel wood (i.e., ICSs). Ideally the NGO candidate is already working with and through CFUGs to promote and disseminate ICSs in tandem with community forest management and other SLAs. As such, USAID's resources could focus on building CFUG capacity to further integrate population perspectives and FP activities into ongoing programs, preferably via the same service providers.

P-H interventions will address high fertility and unmet FP demand in forest-dependent subpopulations and use community-based approaches that build capacity of CFUG/women/Dalit groups to promote FP practice, dispel common misconceptions, educate and assist women and couples to adopt correct use of temporary and emergency methods of contraception, and refer other potential users for permanent methods of contraception. Health interventions will address a leading cause of mortality among children and generate other conservation and economic impacts and PHE synergies that will increase the resilience of forests and forest-dependent families and peoples' participation in governance and democratic processes. Introduction of ICS technology will also increase the capacity of local entrepreneurs to build and market the stoves (which are custom-made for each client in their home) and contribute to economic development at local levels. It is envisioned that these high impact P-H interventions will work synergistically with CF forest management/ governance and sustainable livelihood approaches to generate results that will mitigate vulnerabilities and contribute to post-conflict rebuilding and democracy outcome in Nepal.


Causal Links between Population-Health-Forest Management Interventions
And Post - Conflict Building and Democracy Outcomes in Nepal
Pop-Health Interventions linked to Community Forest (CF) Management/ Governance
Increase access and use of reliable methods of family planning
Reduce fertility and increase birth spacing
Fewer and healthier children
More time for parents to participate in CF and sustainable livelihood activities
Improve food security and living conditions
Reduce Migration and encroach-ment in forest corridors
Encourage youth (15-24) to delay marriage and child-bearing
Increase opportunity for youth to participate in CF and linked Pop/H activities
Enhance youth capacity to advocate for social change
Increase number of youth in key positions of CFUG
Better transparency and good governance performance of CFUG
Ensure management of Nepal's natural resources in a democratic way
Increase access to smoke-less fuel-efficient stove
Reduce pollution in home
Decrease time and money spent on health problems
More time and money for economic and governance activities
More resources for economic activities
Reduce poverty and increase economic activity in community
Decrease demand for fuel wood
Reduce forest and species loss
Improve conservation and biodiversity
More sustainable production and harvesting of forest products
Increase CFUG assets and self-reliance
Enhance Post-Conflict Building and Democracy
Source: Leona D'Agnes
PHE Specialist,
Nepal NRM-PHE Assessment

6.0 RECOMMENDATIONS FOR PHE PROGRAMMING IN NEPAL

The team believes that USAID's resources can best be used to capitalize upon ongoing CF-livelihoods-health initiatives, particularly those with potential for replication and expansion. This is not meant to suggest that USAID should work exclusively with SAGUN partners. On the contrary, other INGOs and local NGOs implementing CF and governance initiatives through CFUGs with support from other donor agencies should also be considered. Examples include WWF/Nepal, who is working on the Terai Arc Landscape (TAL) project to integrate health interventions into ongoing CF-livelihoods projects with funding from the Johnson & Johnson Foundation. Women Acting Together for Change (WATCH) is another NGO that is promoting health interventions (deworming) in conjunction with natural resource management strategies in Katmandu watershed areas. In the High Mountains and Eastern Himalayas, The Mountain Institute (TMI) and WWF/Nepal have ongoing CF projects that could serve as the entry point for integration of FP interventions and ICSs. A more complete list of ongoing NGO projects is provided in Attachment B.

The UK's Department for International Development (DFID) is also supporting a Livelihood and Forestry Programme (LFP) that builds upon previous CF gains and works with local NGOs and CFUGs in the Terai and Mid-Hill districts. One model that successfully linked CF and safe motherhood interventions is of particular relevance. The Swiss Development and Cooperation Agency (SDC) is working to improve livelihoods of local poor people through sustainable management of local forests in three districts in the Central and Western regions. Likewise, SNV Netherlands is supporting an ongoing biodiversity sector program that is supporting forestry management and livelihoods, focusing on gender and social equity issues.[14] All work with and through CFUGs and local NGOs, which could also be invited to respond to task orders for PHE activities. Dovetailing of USAID's resources with DFID, SDC or SNV programs could maximize the potential for resource leveraging (LFP runs through 2011) and the coordination of international assistance to the health and forestry sections. Close coordination with those donor personnel at central/district levels would be necessary to prevent duplication of effort and enhance collaboration.

6.1 SITES FOR PHE MODELING AND POTENTIAL FOR SCALE-UP

Districts in the Terai zone should be prioritized for PHE modeling because half of all people in Nepal reside in villages and district headquarters located in the Terai which contains only 23% the country's land area. Population density is particularly high in buffer zones (BZs) surrounding protected areas. In Siddhapuri BZ in Bardia (Midwestern Region) for example, we were able to estimate the population density based on the data provided during a FGD with executives of the Buffer Zone User Group. An estimated 101,000 people

[14] See Attachment C: List of Ongoing, Completed and Planned Projects in the Forestry Sector.

currently reside in the 135 km² area of the buffer zone, where the population density average 748 persons/km²—nearly four times the national figure (179). The average household contains 8.7 members, which also exceeds the national average. The same FGD participants complained about the problems they are experiencing with overpopulation of animals in the forest (an indication of effective protection) that increasingly infringe on their homesteads and raid their garden plots. DOF regulations prohibit people from killing any type of animal in the buffer zone but the increasing conflict between people and animals may necessitate some type of reform that would allow BZ dwellers to cull overpopulated and non-threatened species of forest animals. Although such problems lie outside the realm of a pilot PHE project's ability to respond, nevertheless the project could provide incremental funds to encourage researchers who are investing resource use patterns and carrying capacity issues in BZs to also gather and analyze population data which could generate information needed to forecast thresholds for sustainability harvesting of forest resources and guide adaptive management planning processes to cope with expanding human and animal populations in the buffer zone.

It is also important for USAID to support PHE models in the Mid-Hill and High Mountain districts so as to test appropriate service delivery mechanisms that jive with the conditions found in those locations which differ greatly from those in the Terai. The potentials for rapid scale-up of PHE interventions on a district or corridor or landscape basis are very promising (assuming availability of resources) and few countries in the developing world present such opportunity.

The presence of two large landscape projects managed by WWF—one in the Terai Arc (covering the entire southern part of the country) and the other in the Sacred Himalayan Landscape (bordering western Bhutan and China)—offer possibilities for working with large numbers of user groups to replicate successful PHE models in a large number of districts that are contiguous and share similar biological and cultural heritage and resources. It is unlikely that one PHE approach will be appropriate for application and replication throughout the country, given the wide diversity in landscape and culture in the country's three main bioregions. Thus, it is highly recommended that USAID support at least one pilot PHE activity in each of the bioregions.

6.2 INDICATIVE PHE PILOT PROJECT DESIGN

The illustrative task order should encourage candidate NGOs, CFUGs and federations to respond to USAID's desired parameters for PHE programming. It should provide a definition for PHE such as "the linkages between services that combine aspects of natural resources management or similar environmental work and the provision of reproductive health services, including family planning, and other relevant health services (i.e., promotion of improved cooking stoves that reduce indoor pollution and demand for fuel wood)." It should also describe the overarching goal and specific objective(s) of the PHE pilot initiative as well as other aspects of the project design. Recommended parameters for the PHE task order are shown below:

Project Name: Opportunities in Population and Health for Community Forest User Groups (OPH-CFUG) in Nepal.

Goal Statement**:** Improve quality of life in communities that depend on forest resources and enhance management of Nepal's natural resources democratically.

Objective*:* Build capacity of effective civil society organizations (CFUGs, BZUGs, local NGOs) in rural Nepal to develop and evaluate mechanism that promote community-based family planning and alternative energy technologies in tandem with community forest governance and natural resource management involving local people.

Illustrative Tasks

- Promote ICS and FP interventions in tandem with community forest/natural resource management using peer education and community-based approaches.

- Integrate adolescent reproductive health into ongoing CFUG/BZUG initiatives that mobilize and train youth in good governance and natural resource management (i.e., Youth Anti-Poaching Units in the Terai).

- Incorporate modules on FP, PHE, and adolescent reproductive and sexual health into ongoing functional literacy training courses targeting CFUG members (both females and males) and other persons living in forests/buffer zones.

- Build capacity of LRPs and women motivators to catalyze and facilitate activities among CFUG/women/Dalit groups that address unmet FP demand, dispel misconceptions about contraceptives, and create an environment that enables women and couples to adopt FP practices that can improve their family livelihood and achieve their reproductive aspirations.

- Incorporate population and health perspectives and indicators into community forest/buffer zone operational plans, Participatory Well-Being Ranking (PWBR) tools, community-based SLA monitoring tools, adaptive management frameworks, and other program M&E systems and tools to establish baseline data on selected health and FP practices of user communities; to generate information needed to facilitate PHE integration, track change over time, and measure the impact of PHE interventions that generate multiple benefits; and to guide the design of effective advocacy strategy to encourage CFUG leaders to appropriate more group funds for PHE interventions and programs.

- Facilitate dialogue between local CFUGs and FECOFUN executives and health officers/personnel at VDC and district levels to identify issues and obstacles related to family planning. Facilitate joint planning and actions to bridge gaps in access to FP services at the user level and create demand for FP and a conducive environment for couples to adopt FP practices via peer education, guided group interactions and CBD of contraceptives (condoms, pills, ECPs, and perhaps DMPA).

- Examine population and demographic trends in buffer zones of national parks and reserves in conjunction with trends in use of natural resources to generate information needed to forecast thresholds for sustainability harvesting of forest resources and to guide adaptive management planning processes to cope with expanding human and animal populations in the buffer zone.

6.3 MONITORING AND EVALUATION METHODS AND INDICATORS

Much of the monitoring that has taken place to date in NGO-managed community forestry and governance projects has been at the process or activity level. This has limited the ability of NGOs and partner CSOs (CFUGs/BZUGs) to use findings and adopt them into future planning. Under SAGUN, significant progress was made in developing CSO capacity to use improved M&E systems and tools to assess their institution's governance performance (in regard to transparency, accountability and inclusiveness), and whether benefits derived from CF are being distributed equitably and the extent to which CFUGs have introduced and supported pro-poor programs and anticorruption drives.

Over the past four years, for example, CSO partners working under SAGUN have conducted a PWBR among 85,854 user households in 18 districts throughout the country. There is evidence to show that the PWBR tool was user-friendly and CFUGs used the results to identify the poor and increase their access to and benefits from community forestry. The PWBR tool incorporates eight indicators/criteria, many of which are relevant to PHE program monitoring and evaluation (e.g., family size of user household, education level of household members and physical properties and social status of users). A few additional indicators could be integrated into the PWBR process to track progress toward desired PHE outcomes (e.g., use of FP methods; possession and use of ICSs, etc.). Still other indicators could generate information on the reach and impact of FP and PHE information dissemination efforts. A list of indicative PHE indicators that could be incorporated into existing M&E systems and tools and used to track and measure progress and impact toward stated goals and objectives of the PHE pilot program are listed below.

Indicative Indicators: For measuring/tracking change and impact at the household level.

- % of households that posses and use a fuel-efficient stove or biogas digester;
- % of households with members reporting persistent cough or other signs and symptoms of respiratory distress;
- % of couples currently using any method of FP;
- % of women of reproductive age (15-49) giving birth in past 12 months (recent fertility);
- % of young (15-24) married females reporting use of any FP method during last occurrence of intercourse;
- % of respondents (15-49) who disagree with statement "contraceptives made you weak;"
- % of respondents who can recall a key PHE message (i.e., "to improve livelihood, we must protect the forest, plan our families and use fuel-efficient cook stoves");
- % of youth (ages 15-24) actively involved in PHE activities in their community; and
- % of household respondents who agree with the statement "my family's status is better now than five years ago."

Indicative Indicators: For measuring/tracking change and impact at the institutional level.

- % of CFUG Executive Committee members in the 15-24 age groups (youth inclusion);
- % of CFUGs allocating funds to subsidize transportation expenses for women and men to access permanent FP methods (sterilization) and/or birth-spacing methods (IUD, DMPA) that require trained health personnel to administer;
- Amount of funds allocated by CFUGs to support PHE activities in past 12 months;
- Number of plans developed jointly by CFUG and DOH personnel to improve access to and demand for FP services and facilitated by local intermediary (FECOFUN, NGOs, etc.); and
- Number of CBD outlets established and managed by CFUGs.

7.0 NEXT STEPS FOR USAID

To fast-track the PHE pilot project, it is essential that USAID/Nepal come to a final decision on a number of issues, particularly the eligibility criteria and tasks for NGO subcontracts. Recommended eligibility criteria include:

- The NGO must be involved in an ongoing community forest initiative in Nepal that preferably uses sustainable livelihood approaches.
- The NGO's program must work with and through CFUGs/BZUGs.
- The NGO program should have secure funding through December 2007 (at a minimum).

LEONA D'AGNES, ARD, INC., JULY 2006

Women planting rice in the fertile river plain known as the Terai in the south of Nepal.

- The NGO must be willing to contribute matching funds or in-kind support equivalent to 15% of total estimated budget).
- The NGO must also be interested in building its organization's capacity to plan and implement population/health strategies and activities in conjunction with community forest management and governance strategies.
- The NGO must have no reservations in the promotion of condoms or other modern methods of family planning.

8.0 SCOPE OF WORK FOR CDM

1. Prepare task order for the PHE Technical Assistance provider(s) covering, at a minimum, the following responsibilities :

    - Train and backstop implementing NGO staff who will assist CFUGs to plan, implement and monitor community-based family planning activities and peer education and behavior change communication strategies. (Potential technical service providers: ADRA, SAVE.)

    - Identify existing literacy training material/module on family planning and adolescent reproductive and sexual health that can be adapted and used by CFUGs in their literacy training programs for illiterate females and males in rural Nepal. Adapt modules as needed to assure that content and messages targeted to adult audiences contain up-to-date information about FP methods, information to dispel common misconceptions about contraceptives, information about benefits of FP practices, etc. Similarly, assure that modules targeted to adolescents contain appropriate information on sexual and reproductive health, encourage youth to delay early sex and childbearing and encourage married youth to use FP to prevent unwanted pregnancy. (Potential service providers: ADRA, World Education International.)

2. Prepare terms of reference for international consultant that will provide technical assistance and support for PHE pilot program development and monitoring and evaluation activities.

3. Prepare task order for local implementing institutions consistent with USAID's desired parameters for PHE programming (see illustrative tasks and indicative indicators in Section 6).

4. Prepare and issue letter of invitation to selected NGOs soliciting response to task order and cost proposal. NGOs with capacity to respond to the desired PHE program parameters are listed below by bioregion. Letter of invitation should be sent to at least one NGO from each of the three bioregions.

    - Terai Zone: WWF and/or CARE;

    - Mid-Hill Districts: Resource Identification and Management Society (RIMS); and

    - High Mountain/Eastern Himalayas: The Mountain Institute and/or WWF/Dolpa.

5. CDM's finance, administrative and performance monitoring mechanisms in place to support sub task order agreements.

ATTACHMENT A: LIST OF NGOS WITH ONGOING COMMUNITY FORESTRY-HEALTH INITIATIVES IN NEPAL

Following is a list of INGOs and local NGOs associated with community forestry and natural resource management (NRM) projects in Nepal that incorporate sustainable livelihood approaches and health-related activities. The list is not intended to be inclusive; other NGOs may also be involved in similar activities which did not come to the attention of the team during the short duration of the NRM-PHE assessment visit in July 2006.

Organization	Project Name – Region/District	Health Component
WWF/Nepal	SAGUN – Dolpa District and North Mountain Conservation Project – Shey Phoksundo National Park and Buffer Zone (Mugu and Dolpa)	• Primary health care • Traditional health care • Village sanitation • Improved cooking stoves • Medicinal plants • Kitchen gardening
	Terai Arc Landscape (TAL) Project – Kailali, Bardia, Banke, Dang and Palpa Districts and Chitwan National Park, Bardia National Park, Shuklaphanta Wild Life Reserve, Parsa Wild Live Reserve	• Improved cooking stoves, • Toilet-attached biogas plant • Hand pumps • Primary health care (Kailali) • Essential oil production
	Sagarmatha Community Agroforestry Project: High Mountains, Sagamatha National Park	• Improved cooking stoves
	Kangchenjunga Conservation Area Project	• Community medical assistant training
CARE/Nepal	SAGUN –Kanchanpu, Kailali, Bardiya, Banke, Parsa	• Goat raising • Village sanitation
	Chure Watershed Management, Sallahi, Mahottari	
Resource Identification and Management Society RIMS/Nepal	SAGUN, Dhading Environmental Protection (DEP) Projects, CDR/Dhading	• Improved cooking stoves • Biogas • Drinking water system • Child nutrition (via linkage with Japan-funded project)
Women Acting Together for Change (WATCH)	NRM and Rural Development Projects – Bhaktapur, Katmandu, Havre in CDR; Kailali in FWDR; Kaski, Kapilvastu, Rupandehi in WDR	• Deworming • Primary health care
FECOFUN	24 districts throughout the country	• Non-formal education - literacy training courses with reproductive health modules for member CFUGs
The Mountain Institute	High mountains: Qomolangma National Reserve, Makalu-Barun, Langtang and Sagarmatha (Mt. Everest) National Park	• Drinking water systems

ATTACHMENT B: ANALYSIS OF THE SITUATION RELEVANT TO POPULATION-HEALTH-ENVIRONMENT IN NEPAL

BACKGROUND

About the size of Arkansas, Nepal is a landlocked country of almost 28 million people, located in the Himalayas between China and India. Nepal made the transition from an absolute monarchy to a multi-party democracy in 1990, and has seen 12 governments in the past 8 years. The country encompasses three major bioregions: the fertile river plain known as the Terai in the south, the central hills region, and the Himalaya mountain range in the north. The economy is agrarian, although most households are not self-sufficient and rely on some non-agricultural sources of revenue. Per capita GDP is estimated to be less than US $300. The rapid growth of Nepal's population has led to fragmented landholdings and depletion of forest resources, which are the livelihood of much of the rural people who constituted 88% of the country's population (pre-conflict). The ratio of population to arable land is one of the highest in the world; estimate of population density in 2005 averaged 179 persons per square kilometer.

Nepal is an extremely unequal society, in which millions of undereducated and desperately poor people struggle to eke out their daily existence from a declining natural resource base. Its youthful population is underemployed, undereducated, and insecure. According to the 2001 census, 40 percent of the people are under age 15 and the median age of the population is 20.1, compared to the global average of 26 (United Nations, 2002). More than 40 percent of the people live below the poverty line, and unemployment and underemployment are 17.4 and 32.3 percent, respectively (NPC: 2003). Nepal is the last officially Hindu country in the world, with about 81 percent of its population identified as such. The literacy rate is 45.2 percent overall, which hides the enormous gender gap (27.6 percent of women are literate compared to 62.7 percent of men) common to many aspects of Nepali society.[15]

DEMOGRAPHIC TRENDS

Population in this resource-thin country has *increased more than five-fold in less than a century*. Between 1911, when the first census was taken, and 2001, Nepal's population increased from 5.6 million to 23.2 million, and population density rose from 38.3 to 157.3 people per square kilometer (CBS, 2003). In 2001, the population growth rate was 2.25 percent, life expectancy 59.8 years, and the total fertility rate was 4.1 per woman. Although agricultural output has kept pace with population growth, human welfare has not improved in many areas of Nepal, which was ranked 143rd in the 2003 Human Development Index—and last in South Asia (UNDP, 2003). Population growth has not been uniform across the country, which is understandable given the relative scarcity of natural resources in the northern mountainous area. The rapid growth of the population in the Terai (plains) results from a combination of births and migration from mountains and hills, as people are

[15] The official literacy rate, which differs from other sources, is 65.5 percent for men and 42.8 percent for women (Central Bureau of Statistics, 2003).

lured by better physical facilities such as electricity, transportation, communications, education, and health; more productive agriculture land; and other job opportunities in the plains. The 2001 census summarizes internal migration: 62.8 percent rural-to-rural, 25.5 percent rural-to-urban and 3.5 percent urban-to urban migration (CBS, 2003). The rate of urbanization is also faster in the Terai than elsewhere in Nepal. Because the Terai is situated along the border with India, it also experiences informal and seasonal immigration.

REBEL INSURGENCY AND CAUSES OF FRAGILITY

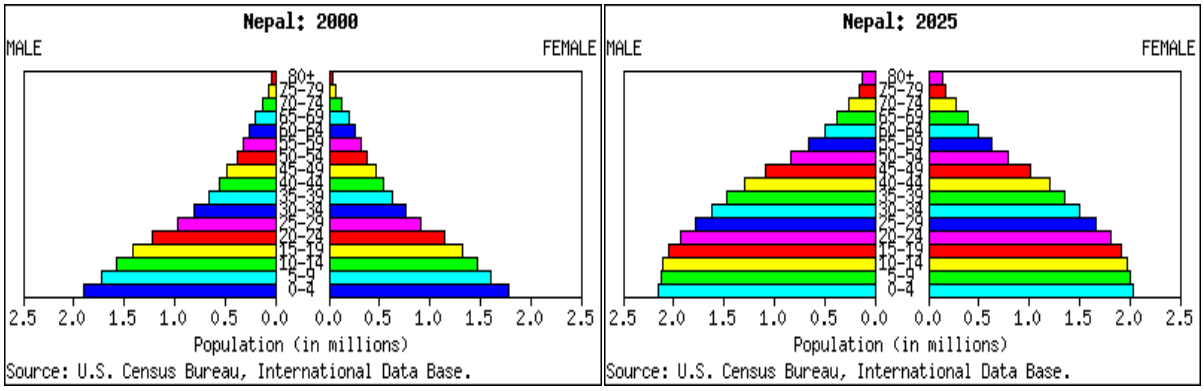
Since 1996, the collapse of Nepali society has been truly dramatic, resulting in over 14,000 deaths, more than 200,000 people displaced internally (most are living in district headquarters and urban areas), and the emigration of about 1.8million. This decade of violence has captured world attention, especially for its impact on children. According to the NGO Watchlist on Children and Armed Conflict (2005), thousands cross the border into India each year, primarily to work in dangerous settings and in the sex trade; a cascade of reports accuse Maoist and government forces of raping girls; approximately 200 children are killed by landmines each year; and an unknown number of children have been recruited by both sides of the conflict to provide military services. Hundreds of schools have been destroyed or disrupted, and teachers have been targeted and harassed as well as students. Although human trafficking has plagued Nepal for decades, many of these human rights failures are directly related to the civil war.

According to Dev Raj Dahal (2004), the conflict in Nepal emerged from two factors. First, important structural dimensions, such as the rural-urban disparity—which has been aggravated by the government's focus on the urban economy of the Kathmandu Valley—and deeply embedded discriminatory practices that defy progressive laws, such as the persistence of an "untouchable" class (the Dalits) and the marginalization of indigenous groups and women. A survey report on the priority problems of the forest and tree-dependent poor people in Nepal during a time of conflict[16] reported that lack of basic health services is a severe problem, particularly among the poor, and a factor that contributed to the Nepal's vulnerability to civil war. Excerpts from the report highlight the key issues:

> *"In general, the poor never expect to get good health treatment in the hospital or clinics. The insurgency has further developed an adverse environment. At its most extreme, demolishing health posts and health clinics were major 'actions' in rural areas. The health workers cannot go freely to rural areas and provide health facilities. Though there are private health services the poor cannot benefit as they have no money to pay for this. An artisan in Palpa elaborated, "We never think of going to hospital for treatment. It is not that we never catch illness, but because we cannot afford the cost in the hospital." As he reported, healthcare has become less accessible for them. A resource poor farmer in Sarlahi declared "If any member of the family is sick, we fall into debt with the local moneylender, who always charges high interest."*
>
> *"The government's effort to provide primary healthcare, drinking water and sanitation has been the focus of its poverty reduction programme. In primary healthcare, the government focuses on immunizing children and reducing diarrhea, acute respiratory disease and improving reproductive health. "Government's effort lies in providing drinking water facilities to all and improving its quality, increasing public awareness of health and sanitation" (UNDP 2002). These programmes are yet to be seen in practice as they are not being implemented. The insurgency has also been a boon to the government line agencies to hide their faults. "*

[16] DFID: 2005 "Survey on the priority problems of the forest and tree-dependent poor people in Nepal during a time of conflict."

The country's relatively large youth cohort and the tension produced by the lack of jobs is another factor that enhanced fragility and enabled the Maoists' to recruit young males and females into its rebel insurgency movement. These same factors continue to represent threats during Nepal's transition to a stable state and underscore why *Nepal's youth bulge needs to be taken into consideration in post-conflict scenario* planning. The population pyramids below show the age distribution of Nepal's population in 2001 and the projected distribution in 2025 based on current rate of expansion (2.25 per annum).



Recent research suggests a strong correlation between a youthful population and insurgency based civil war in *least*-developed countries[17]. The same study found that "relative cohort size," combined with current information about infant mortality, population size and governance, can be used to *predict* where conflict will occur 10 years from now. By identifying large relative cohorts up to 10 years before they reach adulthood, policy makers and donors can devise better conflict-prevention policies and strategies for easing the transition and thus reduce the chances of conflict. Based on Nepal's population age structure in year 2001, it is estimated that the ratio of young adults to older adults will exceed 1.5 in 2010 indicating strong possibility for renewed conflict *if economic opportunities do not expand in tandem with the youthful population.*

Even if fertility were to decline to replacement level tomorrow, Nepal's population will continue to expand until at least the middle of the next century due to the large number of young people entering the reproductive age group. Such reality underscores the need for more programs and interventions to encourage young people to delay marriage and childbearing, which can help to slow population growth. Examples include programs that: (1) increase opportunities available to young people, (2) use international aid to create an internal volunteer corps, (3) expand secondary and tertiary schooling opportunities, (4) enable universal suffrage for young people, and (5) maintain fair and open political system[3].

ISSUES RELATED TO WOMEN AND CHILDREN'S HEALTH

Nepal's ratio of maternal mortality (539 per 100,000) remains high for this region. The low social status of women is reflected in early marriage, poor nutrition, low female literacy, poor reproductive health (high parity, short birth intervals, high unmet demand for family planning), and social norms that leave women out of family decision making, undervalued and disempowered.[18] The Maoist insurgency has increased female's vulnerability to rape and sexual exploitation. According to the NGO Watchlist on Children and Armed Conflict (2005), a cascade of reports accuses Maoist and government forces of raping girls. To escape the

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17 Source: Staveteig, Sahar, 2005 "The Young and the Restless: Population Age Structure and Civil War." Wilson Center ECSP Report, Issue 11.

18 Thomas, D., L. Messerschmidt, D. Messerschmidt, B. Devkota, 2004, Increasing Access to Essential Obstetric Care: A Review of Progress and Process, report submitted to Options, UK, Nepal Safer Motherhood Project, Kathmandu, Options and DFID.

violence, girls have fled to urban areas where jobs are scarce, especially for illiterate and poor, and sex work is the only viable options.

Barriers to women's health in rural Nepal mainly center on issues related to accessible, affordable and client-oriented health services, which are generally inadequate and insufficient. Studies show that health services reach only about 40% of the country's population. Women in hill districts and the High Mountain zones are at a particular disadvantage and have to walk great distances to reach government service points. There are also cultural constraints against women traveling alone when can deter appropriate health seeking behavior. The lack of medicine and personnel in public clinics is another problem and the DOH's practice of frequent rotation of doctors and other health personnel further exacerbates the problems. Poverty and lack money for travel and health care cost represent yet other constraints to use of available health and contraceptive technologies. Misconceptions about contraceptives are widespread especially the belief that "contraceptives make one weak" and can interfere with a person's ability to do hard work. During the conflict period, government outreach clinics were often closed for extended period of time which precluded women from gaining access to FP methods. An analysis of socioeconomic dimensions of adolescent reproductive health in four countries of S Asia (including Nepal) found that poor adolescents are often overlooked by current service delivery modes that rely solely on mass media, clinics or schools. Alternative strategies, such as community-based outreach programs, were recommended to better serve the needs of poor young women.

Household Energy, Indoor Air Pollution and Health Impacts

In 2004 Winrock International Nepal (WIN) analyzed the Household Energy and Health situation in Nepal for USAID and documented the following key findings and lessons in their overview report[19]:

- Child infant mortality rate in Nepal is 64.2 and under five child mortality rate is 91 per 1000 (2001);
- Reported incidence of acute respiratory infection (ARI) is 229 per 1000 and the incidence of ARI reported deaths is 184 (2001-02);
- A study done by Nepal Health Research Council and others (in 2001) indicate that PM10 (particulate matter less than 10 microns) concentration for cooking areas as 8,207 μg/m3 where biomass (wood) is burned and 3,414 μg/m3 and 1,504 μg/m3 where kerosene and LPG are used as fuel, respectively;
- A study conducted in a hilly remote area of Nepal to find out the relation between indoor air pollution and ARI in infants and children under 2 years showed that episodes of moderate and severe ARI increased with increments in the level of exposure to indoor air pollution. The study suggested that indoor air pollution is an important risk factor of ARI;
- More than 85% of the total energy demand is met by traditional solid fuels (firewood, agricultural residues, animal waste) in Nepal, and almost 98% in rural areas.

WIN's report synthesized the following lessons learned from ICS and biogas programs in Nepal:

- Market Development - The current working modalities and approaches of various household energy programs are proved to be successful in creating demand for these technologies, however they differ slightly depending upon the technology. Scaling up biogas and ICS technologies and market development for moving up to cleaner fuels (like LPG) that targets peri-urban and urban areas (especially the urban poor) is needed;

[19] Winrock International Nepal. 2004. Household Energy, Indoor Air Pollution And Health Impacts Status Report For Nepal: Under The USAID -Winrock LWA Agreement "Increased Use Of Renewable Energy Resources" Program.

- Technology Standardization - Quality control and specific technical standards are available for biogas and ICS technologies. Technology standardization for new models of ICS and other biomass fuel stoves should be developed;
- Health Impact Monitoring - Only ITDG/Nepal is now doing indoor air quality monitoring in one village with traditional stoves and with some interventions. This study together with different household energy technologies should be conducted in many locations and in different settings;
- Social and Cultural Barriers - Consumer education, awareness creation etc. are being carried out by these household energy programs but the concept of 'social marketing' needs to be implemented in the country to address various social and cultural barriers.

USAID'S SUPPORT TO THE HEALTH SECTOR

USAID's support in the health sector is one of the most longstanding and successful development assistance programs in Nepal. Through a strong and collaborative partnership with the Government of Nepal, activities reach more than 11 million men and women of reproductive age and 3.5 million children under the age of five. The fertility rate has decreased by 20% since 1991, due to increasing access to quality family planning services. Child mortality has declined by more than 40% since 1991, due to increased availability of key child health services. Vitamin A supplementation of children 6-60 months of age has become a national program, averting more than 15,000 child deaths each year. Access to treatment for child pneumonia - the number one cause of child mortality in Nepal - has increased by more than 50% in program areas through community-based interventions. HIV/AIDS prevention efforts have significantly increased condom use, with over 90% of female sex workers and their transport worker clients in the Eastern Terai reporting use. Pilot malaria and kala-azar programs have increased community-level knowledge about these diseases[20].

FORESTS AND FOREST USER GROUPS

Forests are central to the farming systems in Nepal and fuel wood supplies over 75 percent of the country's energy requirements. Moreover, forests play a critical role in the agro -ecological cycle of cropping patterns, animal husbandry, and forest products that sustains agricultural production. The Forest Act 1993 and Forest Regulations 1995, which provide a regulatory framework, identified forest user groups as self-governing institutions with rights to acquire, transfer, and sell forest products. They confirmed that natural as well as degraded forest areas should be handed over, with benefits accruing to group funds for community and forest development.

A critical component of community forestry is the user-group formation process. This approach seeks consensus by increasing informed understandings about resource rights and managerial responsibilities. Forest users are identified – including primarily, secondary and tertiary users. Interest groups composed of different kinds of users – especially, women as well as poorer, landless, low caste, and ethnic group users – are then formed to encourage frank discussion and open communication. To date, 1.5 million households (35% of Nepal's total population) have been organized into over 14,000 user groups who are managing 1.2 million hectare of forests (25% of the total forest area of the country). Over the past 40 years, several donors have channeled support to the forestry sector for activities involving user groups. These USAID, DFID, SDS Swiss Government, SNV Netherlands Government, Australian Government, GTZ German Government, JICA, UNDP and others.

Despite significant foreign assistance to the forestry sector and CFUG over the past 40 years, Nepal's forest coverage and biological diversity are rapidly dwindling due to several factors. A recent study commissioned by

[20] Downloaded from USAID Nepal website (July 2006).

WWF[21] identified the direct threats to forest and species loss in the Terai and reveal how the threats are influenced by root cause factors and how together they make up a complex web of interaction. Among the main root causes is Migration and Population; others include (1) the Livelihood conditions of the people, (2) Common Property Resources, (3) Overlapping and contradictory legislation, (4) Liberalization policies and (5) Political instability/insecurity.

THREATS TO FOREST/SPECIES LOSS AND THE ROLE OF POPULATION

Three direct threats to forest and species loss were also identified and in each case population dynamics play a major role. The first major threat is encroachment/settlement in forests and buffer zones of national parks which is exacerbated by rapid population growth due both to high fertility & increasing in-migration. The same study identified two main "push" factors for increasing in-migration to the Terai e.g., poverty and food insecurity. Majority of migrants are coming districts in the Mid-Hill region particularly Jajarkot, Surkhet, Jumla, Rolpa, Gulmi, Arghakhanchi, and Kaski. Few donors are presently channeling resources to redress the push factors in these districts with the exception of IFAD which is supporting leasehold forest and livestock development inputs in selected VDC of those districts.

The second main threat to forest and species loss is overgrazing, especially in government forests. The increase in population and popularity of livestock rearing means this threat will continue to grow. The third main threat is over harvesting of timber and fuel wood. Rapid population growth encourages felling of trees for construction purposes at the level of the community. Also, population increase coupled with the lack of affordable alternative energy technologies drives demand for fuel wood. The same analysis describes the complexity of the "livelihood conditions" influencing human interactions with the forest. These include the (a) Livelihood strategies of the people – most are heavily dependent on agriculture and forest resources, (b) Vulnerabilities of the poor (food insecurity, impacts from natural disasters and degradation of natural resources, and (c) Assets - human, natural, financial, physical and social capital. Human capital in Nepal is lower than neighboring countries (poor access to health and education services in rural areas and lack of skilled labor resources). Moreover, lack of financial income is a significant constraint for poor forest-dependent households. Borrowing is a common coping strategy but the high interest rates charged by money lenders further impoverish many vulnerable families.

USAID'S SUPPORT TO CFUG

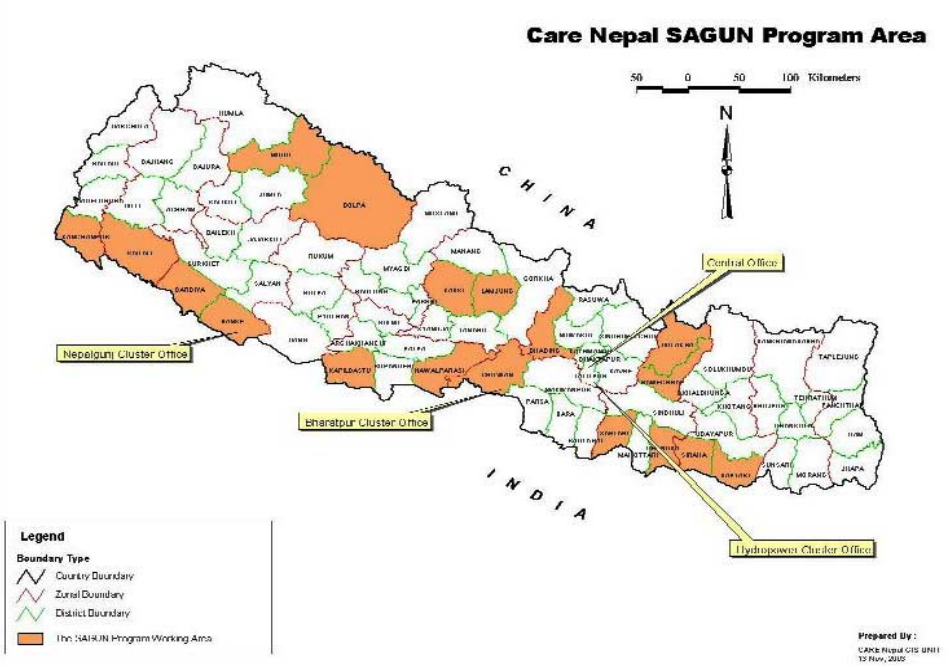
USAID and other donors have recognized the potential of forest user groups (FUG) to serve as a broader community development institution at local levels. The SAGUN project, supported by USAID, has been working with community forest and buffer zone user groups and their federations to strengthen control over the management of natural resources in a democratic way, and to enhance the capacity of user groups to become socially and economically self-sustaining. Results from program monitoring and evaluation show SAGUN has generated significant impact on forest governance, social equity, accountability and other outcomes that are contributing to the growth and development of democratic institutions and processes in rural Nepal. CFUG visited during an assessment in July 2006 were well organized, had a sense of good governance, and their leaders reportedly had become more accountable and transparent; decision-making was taking place through participatory method involving all stakeholder. CFUG write their own constitutions and operational plans and execute such using resources from their own group funds. Not all CFUG, however, are resourceful. Those with donor support have benefited from income generation activities, drinking water schemes, women empowerment, training, technical input, health inputs such as water and sanitation,

[21] WWF/Nepal 2005 "The Root Causes of Biodiversity Loss in Terai Arc Landscape: An exploration of factors affecting biodiversity loss and the relationship of livelihoods.

improved cooking stove, literacy classes and governance perspective. A more complete analysis of the SAGUN project experience is presented in a separate report[22].

USAID/Nepal presently is reorienting ongoing programs and resources to increase focus on conflict and post-conflict situations, good governance, institutional capacity building and other imperative concerns in a fragile state. Civil society organizations (CSO) that are strong at the local, district, and national levels, such as CFUGs and their federations, will continue to factor largely in USAID's evolving strategy to support Nepal's transition from a recovering to stable state. These organizations include a range of indigenous non-governmental organizations, professional and business associations, trade unions and farmers associations, ethnic and home welfare organizations, community development and self-help organizations, and religious groups.

In the absence of local elected representatives, CFUG represent one of Nepal's very few nationwide, decentralized, self-governed, democratically elected institutions, and have a widespread civil society constituency that often serves as a grassroots stabilizing force and an engine of growth in marginal areas. Hence, it is likely that CFUG and their federations will continue to factor largely in USAID's post-conflict building and democracy initiatives in Nepal.



[22] ARD, Inc. July 2006 "Nepal User Group Natural Resource Management/Population, Health, and Environment Assessment: Final Report.

ATTACHMENT C: LIST OF ONGOING PROJECTS IN NEPAL'S FOREST SECTOR

SN	Name of Project	Donor	Period	Target Area	Major Activities
1	Biodiversity Sector Programme for Siwalik and Terai (BISEP-ST)	SNV / Netherlands	December 2002 to July 2006 2006 – 09 ?	Chitwan, Makwanpur, Bara, Parsa, Rauthat, Sarlahi, Mahottari, Dhanusa	• Develop suitable forest management system and enhance implementation skill for sustainable forest management • Support livelihood focusing gender and social equity issues
2	Livelihood and Forestry Programme (LFP)	DFID British Government	March 2001 to February 2011	Baglung, Myagdi, Parbat, Dhankuta, Terhathum, Bhojpur, Sankhuwasabha, Rukum, Rolpa, Salyan, Pyuthan, Dang, Rupandehi, Kapilvastu, Nawalparasi	• Support livelihood activities • Capacity development of CFUGs • Management Support at central and implementation level • Support sustainable forest management
3	Nepal Swiss Community Forestry Project (NSCFP)	SDC Swiss Government	July 2004 to July 2008	Dolkha, Ramechhap & Okhaldhunga	• Support community forestry through sustainable economic, environmental and institutional development of CFUGS • Improve livelihood of local poor people through sustainable management of local forests
4	Participatory Conservation Programme (PCP) - Phase II	UNDP	August 2004 to December 2006	7 National Parks and Buffer Zone	• Continuation of successful programs of Phase I in Buffer Zone management and development and feedback in policy formulation • Minimize Park and People Conflict • Support livelihood of local people
5	Terai Arc Landscape (TAL) Project	WWF	July 2001 to July 2006 2006 –11?	Chitwan NP, Bardia NP, Shuklaphanta WLR, Parsa WLR, and DFOs of Kailali, Bardia, Banke, Dang and Palpa districts	• Plan formulation and management at landscape level • Integration of livelihood with biodiversity conservation to conserve corridor and biodiversity • Support protected area and forest management
6	Western Terai Landscape Complex Programme (WTLCP)	UNDP/GEF, SNV, WWF	October 2003 to October 2011	Bardia, Kailali, Kanchanpur	• Biodiversity conservation of Western Terai to support livelihood of local resident through integrated landscape level management system • Capacity development of institutions working in biodiversity conservation • Integrated biodiversity conservation in national forest, protected forest, buffer zone and other sensitive areas • Support for agri-biodiversity •

SN	Name of Project	Donor	Period	Target Area	Major Activities
7	Chure Watershed Management Program	CARE Nepal	March 2001 to December 2006	Sarlahi, Mahottari	• Support management of resources in Chure area and livelihoods of local residents • Sustainable natural resource management involving local people • Capacity development of local institutions / stakeholders
8	Strengthened Advocacy for Governed Utilization of Natural Resources Program (SAGUN)	USAID	November 2002 to December 2006	Dhading, Banke, Bardia, Kailali and Dolpa	• Enhance management skill for natural resource management • Develop advocacy skill of civic societies • Encourage women participation
9	Leasehold Forest and Livestock Development Program	IFAD	September 2005 to August 2013	Taplejung, Panchthar, Ilam, Khotang, Solukhumbu, Udaypur, Rasuwa, Nuwakot, Dhading, Kathmandu, Bhaktapur, Lalitpur, Makwanpur, Sindhuli, Manang, Lamjung, Gorkha, Tanahun, Kaski, Syangja, Palpa, Gulmi, Arghakhanchi, Surkhet, Dailekh, Jumla, Humla, Kalikot, Jajarkot, Mugu, Dolpa, Bajura, Bajangh, Doti, Achhaam, Darchula, Baitadi, Dadeldhura	• Handing over parts of national forest area to local poor through leasehold forest user groups • Capacity development of leasehold forest user groups • Coordinate with other supporting agencies to carry income generation activities

LIST OF RECENTLY COMPLETED PROJECTS

SN	Name of Project	Donor	Period	Target Area	Major Activities
1	Nepal Australia Community Resource Management and Livelihood Project (NACRMLP)	AusAID Australian Government	February 2003 to June 2006	Sindhupalchok & Kavrepalanchok	• Sustainable natural resource management • Income generation activities • Community based resource management
2	Community Development and Forest/Watershed Conservation Project (CDFWCP) - Phase II Follow Up Follow up Period	JICA Japanese Government JICA	July 1999 to July 2004 July 2004-July 2005	Kaski & Parbat	• Promote counterparts and the villagers' skills and knowledge of methodology and process of the improved model • Disseminate the improved model to the counterpart organizations wherever possible.
3	Churia Forest Development Project (ChFDP) - Third Phase Follow up Period	GTZ German Government German Government	January 2001 to December 2004 January to December 2005	Siraha, Saptari & Udayapur	• Support Community Forest User Groups • Capacity development of local stakeholders

SN	Name of Project	Donor	Period	Target Area	Major Activities
4	Natural Resources Management Sector Program (NARMSAP)	DANIDA	1998-2005	38 hill districts: Taplejung, Panchthar, Illam, Solukhumbu, Khotang, Udaypur, Rasuwa, Nuwakot, Dhading, Kathmandu, Bhaktapur, Lalitpur, Makwanpur, Sindhuli, Manang, Lamjung, Tanahu, Gorkha, Kaski, Syangja, Gulmi, Arghakhanchi, Palpa, Surkhet, Dailekh, Jumla, Humla, Kalikot, Jajarkot, Mugu, Dolpa, Bajura, Bajangh, Doti, Achham, Darchula, Baitadi, Dadeldhura	• Forest Management through CFUG • Tree Improvement and Silviculture Support • Soil and Watershed Management Support • Training support for community forestry program • Central Level Support

LIST OF PLANNED PROJECTS

SN	Project	Donor	Duration	Target Area	Major Activities
1	Conservation and Sustainable Utilization of Wetlands	UNDP/GEF	2006 to 2009	Four districts	• Integration of wetland biodiversity conservation values into national policy and planning framework • Strengthen national institutional, technical economic capacity for wetland biodiversity conservation and sustainable use • Enhance collaborative management of wetlands resources for conservation and sustainable livelihoods
2	Sustainable management and Utilization of NTFPs in Terai Region of Nepal	ITTO	Three years	Jhapa, Morang, Sunsari	• Improve marketing and processing of NTFPs in the Terai region. • Develop appropriate cultivation and management techniques for high value NTFPs and promote their adoption in national, leasehold, and community forests and private farmlands.
3	Watershed Management for Livelihood Improvement	JICA	NA	Kaski, Parbat, Myagdi, Baglung, Tanahun & Syanja	• Support livelihood through conservation and development of natural resources

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