

ネパール村落振興・森林保全計画／緑の推進協力プロジェクト

終了時評価調査報告書（別冊）

インパクト調査報告書

平成11年3月

JICA LIBRARY



J 1150727 (4)

国際協力事業団

林 開 林

JR

99-006

ネパール村落振興・森林保全計画／緑の推進協力プロジェクト

インパクト調査報告書

評価分析分野短期派遣専門家：石塚 真
(日本工営株式会社)



1150727 [4]

序 文

国際協力事業団は、ネパール王国政府の技術協力の要請を受け、村落振興・森林保全計画及び緑の推進協力プロジェクトを平成6年7月16日より計5年間にわたり実施してきました。

当事業団は、両計画が対象地域の村落住民の意識や能力の向上に与えた効果を測定することを目的として、平成10年10月24日から12月10日まで、評価分析分野短期専門家を派遣し「インパクト調査」を実施しました。

同専門家は両計画の対象地域内と対象地域外の住民に対して聞き取り調査を実施し、これらの結果を比較することで、両計画が住民にもたらした効果の評価を試みました。そして帰国後の国内作業を経て調査結果を本報告書に取りまとめました。

この報告書が本計画の今後の推進に役立つとともに、この技術協力事業が両国の友好・親善の一層の発展に寄与することを期待いたします。

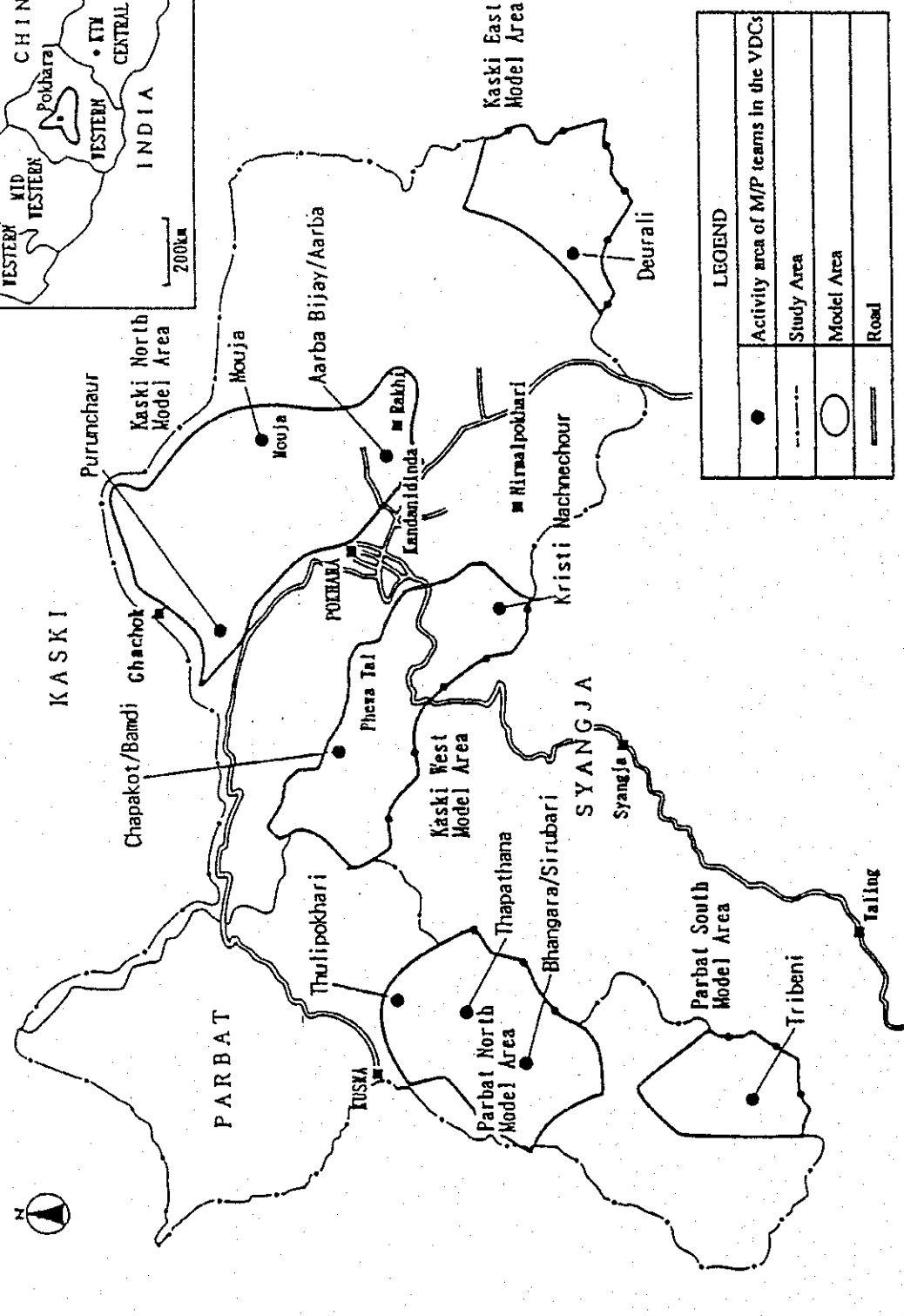
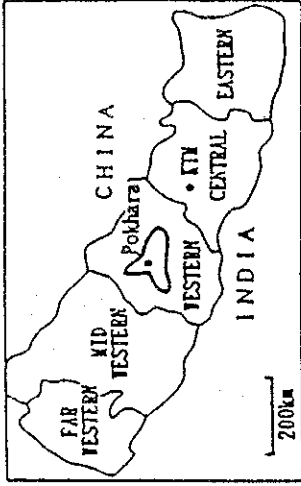
終わりにこの調査にご協力とご支援をいただいた関係者の皆様に対し、心から感謝の意を表します。

平成11年3月

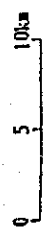
国際協力事業団

林業水産開発協力部

部長 黒木 亮



LEGEND	
●	Activity area of M/P teams in the VDCs
— · — · — ·	Study Area
○	Model Area
—	Road



Location Map

目次

序文
地図
目次
図表リスト

0.	調査結果要約（日本語）	1
1.	はじめに	9
1.1	プロジェクトの背景	9
1.2	調査の目的	10
2.	調査の方法	10
2.1	調査対象地域	10
2.2	「エンパワーメント」の定義	10
2.3	質問票の内容	11
2.4	サンプル数	11
2.5	サンプル抽出方法	12
2.6	調査実施チームの構成	12
2.7	データ処理方法	13
2.8	データ分析方法	14
3.	調査結果	15
3.1	サンプルの構成	15
3.2	参加能力	16
3.2.1	ワードで開催される会議への参加状況	16
3.2.2	会議でのリーダーシップ能力	19
3.3	共同作業能力	21
3.3.1	共同作業に対する理解	21
3.3.2	共同作業実施規則の有無及びその理解	21
3.3.3	費用負担及び無償労働提供に対する理解	22
3.4	村落資源開発及び保全に対する意識	22
3.4.1	森林保全に対する理解	22
3.4.2	村民の関心事の変化	23
3.5	自立能力	26
3.6	その他の情報	28
3.6.1	サブ・プロジェクトへの参加状況	28
3.6.2	サブ・プロジェクト実施に対する満足度	29
3.6.3	プロジェクトの支援を受けずに村落開発を行う自信	30
4.	結論	31

付属書 A:
付属書 B:

質問票
データベース

図表リスト

付表

表 2.1.1	モデルエリア内の VDCs/Wards のリスト.....	T-1
表 2.1.2	サブ・プロジェクト実施 VDCs/Wards のリスト.....	T-2
表 2.2.1	プロジェクトが期待した村民の役割及びエンパワーメント達成度.....	T-3
表 2.5.1	インパクト調査及び開発調査のワード別サンプル数.....	T-4
表 2.5.2	サンプルワード別サンプル数の要約表.....	T-5
表 2.6.1	調査員訓練スケジュール.....	T-6
表 2.6.2	調査員リスト.....	T-7
表 3.2.1	村落開発及び資源保全のためのワード会議への住民参加状況.....	T-8
表 3.2.2	ワード会議における参加住民の積極的発言の有無.....	T-8
表 3.2.3	ワード会議に参加しない住民の不参加理由.....	T-9
表 3.2.4	ワード会議に参加したほうが良いと考えている住民と そう考えていない住民の人数.....	T-10
表 3.2.5	ワード会議において女性が積極的に発言していると考えている 住民とそう考えていない住民の人数（男性から回答）.....	T-10
表 3.2.6	ワード会議において職業カーストの人達が積極的に発言していると考えている住民 とそう考えていない住民の人数（職業カースト以外のカーストからの回答）.....	T-11
表 3.2.7	ワード会議において自身がリーダーシップ能力があると考えている住民と そう考えていない住民の人数.....	T-11
表 3.2.8	ワード会議において自身がリーダーシップを発揮できない理由.....	T-12
表 3.2.9	ワード会議における女性のリーダーシップ能力の評価（男性からの回答）.....	T-13
表 3.2.10	ワード会議における職業カーストのリーダーシップ能力の評価 （職業カースト以外のカーストからの回答）.....	T-13
表 3.2.11	ワード会議の議事録作成システムの有無に対する住民の理解.....	T-14
表 3.3.1	ワード開発のための共同作業参加の必要性に対する住民の理解.....	T-15
表 3.3.2	ワードにおける共同作業実施規則の有無に対する住民の理解.....	T-16
表 3.3.3	共同作業実施規則遵守の状況（規則があるとした住民の回答）.....	T-16
表 3.3.4	ワード開発のための住民費用負担に対する住民の理解.....	T-17
表 3.3.5	公共施設維持管理のための共同作業参加に対する住民の理解.....	T-17
表 3.3.6	公共施設維持管理のための費用負担に対する住民の理解.....	T-18
表 3.4.1	住民が政府に代わって森林資源保全を行うことに対する理解.....	T-19
表 3.4.2	住民が森林資源保全のために無報酬で共同作業を行うことに対する理解.....	T-19
表 3.4.3	事業を実施したワードと実施していないワード住民の関心事 （スコアによる全体評価結果）.....	T-20
表 3.5.1	住民の期待する開発資金の提供者.....	T-21
表 3.5.2	住民の期待する共有林保全のための技術支援の提供者.....	T-22
表 3.5.3	VDU/Ward 開発に関するラジオニュースに対する住民の関心の有無.....	T-23
表 3.5.4	VDU/Ward 開発を友人等と議論することに対する住民の関心の有無.....	T-23
表 3.5.5	森林保全の必要性に関して住民が友人等との会話で話題にすることの有無.....	T-24
表 3.5.6	住民自身がワード開発を行う場合に住民が最も必要と考える外部からの支援.....	T-25
表 3.6.1	カスキ郡とバルパット郡において JICA/JOCV プロジェクトが実施中であることの 住民の理解（事業を実施していないワード住民の回答）.....	T-26
表 3.6.2	住民のサブ・プロジェクトへの参加状況 （事業を実施しているワード住民の回答）.....	T-26

表 3.6.3	事業タイプ（プログラム）別に見た事業参加者の平均参加率 及び一人当たりの平均参加事業数	T - 27
表 3.6.4	事業参加者のサブ・プロジェクトに対する満足度	T - 28
表 3.6.5	事業参加者が選んだサブ・プロジェクト実施に大きく貢献した人/組織 （サブ・プロジェクトに満足している住民の回答）	T - 29
表 3.6.6	新規事業を住民自身により独自に実施する可能性に対する評価	T - 30

付図

図 2.5.1	サンプルワードの位置（Parbat North Model Area）	F - 1
図 2.5.2	サンプルワードの位置（Parbat South Model Area）	F - 2
図 2.5.3	サンプルワードの位置（Kaski North Model Area）	F - 3
図 2.5.4	サンプルワードの位置（Kaski West Model Area）	F - 4
図 2.5.5	サンプルワードの位置（Kaski East Model Area）	F - 5
図 3.2.1	ワード会議においてリーダーシップ能力があると考えている 住民の割合（%）	F - 6
図 3.2.2	ワード会議において女性がリーダーシップ能力がある と考えている男性の割合（%）	F - 7
図 3.2.3	ワード会議において職業カーストの人達がリーダーシップ能力がある と考えているその他カーストの人達の割合（%）	F - 8
図 3.3.1	公共施設の維持管理費を支払う必要があるとする住民の割合（%）	F - 9
図 3.5.1	森林保全の必要性について友人等との会話で話題にする ことがある住民の割合（%）	F - 10
図 3.6.1	サブ・プロジェクト実施に非常に満足した住民の割合（%）	F - 11
図 3.6.2	新規事業を住民自身により独自に実施することができる と考える住民の割合（%）	F - 12

0. 調査結果要約

0-1. はじめに

本インパクト調査報告書は、「ネパール村落振興・森林保全計画」及び「青年海外協力隊緑の推進協力プロジェクト」のパッケージ協力（以下両プロジェクトをひとまとめにして「プロジェクト」と呼ぶ）が、対象地域住民のエンパワーメントに及ぼした効果（インパクト）を調査・分析した結果を取り纏めたものである。本調査は、国際協力事業団（JICA）が雇用した現地コンサルタントを補助として、平成10年10月24日～11月24日までの31日間に実施された。

0-2. 調査の目的

本インパクト調査の目的は、プロジェクトがモデル村落振興事業を実施したワード（村落）及び実施していないワード（村落）において住民に対する聞き取り調査を実施し、調査結果を分析することによりプロジェクトの村落振興事業が調査対象村落住民に与えたインパクトを、住民のエンパワーメントの達成度という観点から評価することである。

0-3. 調査方法

(1) エンパワーメントの定義

プロジェクトのPDM及び関連資料に基づき、プロジェクトが当初期待したであろう住民の役割とエンパワーメントを4つに分類して定義付けを行った。即ち、住民はモデル事業に参加し（参加能力向上）、協力してそれを実施する（共同作業能力向上）ことにより、村落資源開発及び保全の重要性を学び（村落資源開発・保全意識向上）、住民自らが村落資源開発及び保全事業を実施できるようになる（自立能力向上）と定義付けた。

(2) 質問票の内容

質問票は定義付けされたそれぞれのエンパワーメント達成度を事業を実施したワードと実施しなかったワード別に明らかにする内容として作成した。それぞれのエンパワーメント達成度に対応した主な質問内容は次のとおりである。

期待された住民のエンパワーメント達成度	主な質問内容
参加能力向上	<ul style="list-style-type: none">・ ワード内会議への参加状況、発言状況、及び参加意識・ 男性から見た女性のワード内会議での発言力とリーダーシップ・ 他のカーストから見た職業カーストのワード内会議での発言力とリーダーシップ・ 会議議事録作成の有無に対する理解
共同作業能力向上	<ul style="list-style-type: none">・ ワード開発事業への共同作業参加状況・ 共同作業実施の規則の有無に対する理解・ 共同作業実施規則の遵守の状況・ ワード開発事業への費用分担に対する理解・ ワード開発事業の維持管理作業参加及び費用負担に対する理解
村落資源開発・保全意識向上	<ul style="list-style-type: none">・ 住民主体の森林資源保全・管理に対する理解・ 植林や下草刈りへの共同作業参加に対する理解・ 住民男女の関心事の変化（開発調査のベースライン調査結果との比較）

自立能力向上	<ul style="list-style-type: none"> ・ ワード開発事業の資金的支援に対する意識 ・ ワード開発事業の技術的支援に対する意識 ・ VDC やワード開発並びに森林資源保全に対する関心
--------	---

(3) サンプルデザイン

サンプル数は調査期間、調査補助員の人数、及び現地聞き取り調査の効率を考慮して、サブ・プロジェクトを実施したワードと実施していないワードそれぞれの住民約300人、計約600人とした(実際のサンプル数はサブ・プロジェクトを実施したワード319人、実施していないワード328人、計647人であった)。サンプリングは、時間的制約を主な理由として無作為2段階抽出法(Two-stage sampling method)を適用して行った。即ち、第一段階ではモデル事業を実施したワード及び実施していないワードからそれぞれ10ワードを無作為抽出し調査地点とした。さらに第二段階では抽出された各ワードからそれぞれの人口比に応じたサンプルを無作為抽出した。なお、住民の無作為抽出では、開発調査で実施したベースライン調査の世帯構成員調査で無作為抽出された住民男女(17才以上)のリストの中からさらに無作為抽出して行った。

(4) 調査チームの構成

調査チームは短期専門家をリーダーとし、現地コンサルタントを補助として構成された。現地コンサルタントの専門家は、社会経済専門家(調査期間15日間)、農村社会専門家(同27日間)及びデータベース分析専門家(同20日間)の3人であった。社会経済専門家とそのアシスタント及び農村社会専門家は主に質問票の翻訳、20人の聞き取り調査員(計360人・日)の訓練、質問票のプレテスト、聞き取り調査の監督及び分析結果のチェック等を担当した。また、データベース分析担当者は3人のコンピューターオペレーター(計57人・日)と共に収集したデータのコンピューター入力、データベースの構築、データの分析等を担当した。短期専門家は調査全体を設計、監督すると共に、ダミーテーブルの作成、調査結果の評価等を行った。

(5) データプロセス及び分析

聞き取り調査によって収集したデータに基づきデータベースを構築した。利用したプログラムはMicrosoft FoxProである。データプロセスは、基本的にそれぞれの調査項目についてワード別、郡別、モデルエリア(全体)別に集計して行った。また、男女別及びカーストグループ別(職業カーストとその他のカースト)の集計も行った。

分析は、主にサブ・プロジェクトを実施したワードの住民と実施していないワードの住民の期待されたエンパワーメント達成度を比較して行った。また、サブ・プロジェクトを実施したワードの住民に限っては、サブ・プロジェクトに直接参加した(している)住民と参加しなかった住民の期待されたエンパワーメント達成度の比較も行った。こうした比較における統計的有意差は、2×2分割表の χ^2 検定(chi-square test)を有意水準5%で行って検定した。しかし、サブ・プロジェクトを実施したワードの住民と実施していないワードの住民の比較では、多くの質問に対して否定的な返答をする人達が極端に少なく、 χ^2 検定の結果を利用できない場合が数多くあった。さらに、サブ・プロジェクトに参加しなかった住民のサンプル数が著しく少なかったため、参加者と非参加者の比較においても χ^2 検定の結果を利用できない場合が数多く発生した。

0-4. 調査結果

(1) サンプルの構成

下表に示すとおりサブ・プロジェクトを実施したワードの住民と実施していないワードの住民のサンプル平均は性別やカーストグループ別のサンプル比が比較的類似している。しかし、サブ・プロジェクトへの参加者と非参加者の場合は、後者のサンプル数が著しく少ないこともあって、こうしたサンプル比が類似しない場合が多い。従い、参加者と非参加者の比較の妥当性は低いものと思われる。

	事業実施ワードの住民						事業未実施ワードの住民	
	事業参加者数		事業非参加者数		合計・平均		(No.)	(%)
	(No.)	(%)	(No.)	(%)	(No.)	(%)		
総サンプル数	284	100.0	35	100.0	319	100.0	328	100.0
性別								
1) 男性	105	37.0	10	28.6	115	36.1	125	38.1
2) 女性	179	63.0	25	71.4	204	63.9	203	61.9
カースト別								
1) 職業カースト	67	23.6	8	22.9	75	23.5	87	26.5
2) その他のカースト	217	76.4	27	77.1	244	76.5	241	73.5
年齢別								
1) 25才以下	41	14.4	12	34.3	53	16.6	57	17.4
2) 25 - 55	233	82.0	23	65.7	256	80.3	260	79.3
3) 55才以上	10	3.5	0	0.0	10	3.1	11	3.4
職業別								
1) 農業	239	84.2	27	77.1	266	83.4	269	82.0
2) その他	45	15.8	8	22.9	53	16.6	59	18.0
教育レベル別								
1) 公的学校教育なし	163	57.4	16	45.7	179	56.1	172	52.4
2) 10学級まで	96	33.8	17	48.6	113	35.4	119	36.3
3) その他	25	8.8	2	5.7	27	8.5	37	11.3
住民組織構成員								
1) 構成員の住民	185	65.1	33	94.3	218	68.3	210	64.0
2) 構成員でない住民	99	34.9	2	5.7	101	31.7	118	36.0

(2) 参加能力

a. ワード内会議への参加状況

会議への参加は当然のことながら事業（特に断りの無い限り、「事業」とはサブ・プロジェクトを指す）を実施したワードにおいて高く（77%）、事業を実施していないワードにおいて低い（56%）。会議に参加している人達の内、積極的な発言（自己評価）は事業を実施したワードで90%、事業を実施していないワードで88%の人達が行っており両者の差は少ない。会議に参加していない人達に尋ねた参加しない主な理由は、両タイプのワードとも時間的理由（忙しい）が一番多く、事業を実施したワードで46%、事業を実施していないワードで39%となっている。全回答者に「会議に出席したほうが良いと思うか」と質問した結果では、事業を実施したワードと実施していないワードとの差は殆どなかった（前者で93%、後方で91%が「良いと思う」と回答した）。男性だけに対して「ワード内女性は会議で積極的な発言を行う能力があるかどうか」について質問した結果では、事業を実施したワードで93%、事業を実施していないワードで75%の男性が「能力がある」と答えている。男性から見た女性の会議での積極的な発言に対する評価は事業を実施したワードで高いといえる。職業カースト以外の人達だけ対して「ワード内職業カーストの人達は会議で積極的な発言を行う能力があるかどうか

か」について質問した結果では、事業を実施したワードで81%、事業を実施していないワードで79%の人達が「能力がある」と答えておりその差は小さい。

b. 会議でのリーダーシップ

会議でのリーダーシップをとる能力があるかどうかについて回答者全員に自己評価してもらった結果では、事業を実施したワードで57%、事業を実施していないワードで52%の人達がそれぞれ「能力がある」と答えている。この内、男性だけを比較すると、事業を実施したワードで83%、事業を実施していないワードで70%となっておりその差は大きい（女性だけの比較ではその差は小さく、前者で43%、後方で41%である）。同様に職業カーストでもその差は大きく「能力がある」とする人達は、事業を実施したワードで57%、事業を実施していないワードで40%である。事業参加者だけを集計した結果では、「能力がある」とする人達は全体で59%、男性で84%、職業カーストで61%となっている。自己評価とはいえ事業への参加を通じリーダーシップ能力は特に男性と職業カーストの人達において向上したと捉えることができる。

男性だけに「ワード内女性が会議でリーダーシップをとることができるか」と質問した結果では、「できない」とする男性が事業を実施したワードでは8%、事業を実施していないワードで20%となっておりその差は大きい。職業カーストだけを集計した結果ではその差はさらに広がり、「できない」とする男性は、事業を実施したワードで9%、事業を実施していないワードで41%である。男性の見方が変わっただけなのか、女性のリーダーシップ能力が本当に向上したのかは不明であるが、どちらにせよ、事業を実施したワードの住民の方がエンパワーされたといえる。

(3) 共同作業能力

a. 共同作業参加に対する理解

ワード開発のための共同作業への参加は、事業を実施したワード及び実施していないワードの住民とも肯定的に捉えており、「参加する必要がある」とした人達は前者で99%、後方で98%であった。共同作業参加に対する理解は、両者の間でほとんど差がないといえることができる。

b. 共同作業実施規則遵守の状況

自分達のワードに共同作業実施規則があるとした人達に対して、「それは良く守られているか」と質問した結果では、「守られている」と回答した人達の割合は事業を実施したワードで93%、実施していないワードで90%、事業参加者で95%であった。ワードの共同作業実施規則は全般に良く守られていると感じている人が多いといえることができる。しかし、職業カーストの人達だけを比較した結果では、「守られている」と回答した人達は、事業を実施したワードと事業参加者ともそれぞれ95%、事業を実施していないワードで86%となっておりその差は大きい。この結果の捉え方は数多くあると思われるが、事業への参加を通じて職業カーストの人達の共同作業に対する意識は良い方向に変化してきているといえよう。

c. 費用分担に対する理解

ワード開発にかかる費用の分担について質問した結果では、「建設費の分担」、「維持管理作業への労働提供」、「維持管理費の分担」の全てについて多くの人達が肯定的な回答をしており、事業を実施したワードと実施していないワードの差は非常に小さい（全てが95%以上）。しかし、若干の差は「維持管理費の分担」で認められ、「維持管理費を分担する必要がある」とした人達は、事業を実施したワードで99%、実施していないワードで95%である。この差は女性と職業カーストで特に認められ、「維持管理費を分担する必要がある」とした女性は、事業を実施したワードで99%、実施して

いないワードで93%である。また、それは職業カーストでは、事業を実施したワードで99%、実施していないワードで94%となっている。否定的な回答をしたサンプル数が小さく統計的な有意水準の検定は難しいが、プロジェクトの効果として特に女性と職業カーストの共同作業意識が僅かではあるが高まっていると見ることは可能と思われる。

(4) 村落資源開発・保全に対する意識

a. 森林保全に対する意識

政府に代わって住民主体で森林資源を保全することについて質問した結果では、事業を実施したワード、事業を実施していないワードにかかわらず肯定的な回答が多く、両者の差は殆ど認められなかった。同様に植林や下草刈りに対する無償労働奉仕の提供についても両者の差は殆どなく、こうした面での考え方は事業実施の有無にかかわらず地域住民に広く受け入れられているようである。

b. 人々の関心事の変化

人々の関心事 28 項目についてそれぞれの大きさを確認した。28 項目の内容は開発調査（現地調査期間 1996 年 1 月 25 月）と同様のものとし、約 2 年半の間に人々の関心事がどの様に変化したかを事業を実施したワードと事業を実施していないワードの住民それぞれで比較した。なお、関心事の大小は住民の回答に基づきそれぞれの項目についてスコア（最大 100、最小 0）を集計することにより求めた。開発調査のスコアは男女別に集計しているが、ここでは事業を実施したワードや事業を実施していないワードのサンプル全体として集計している。また、開発調査のデータに基づくスコアの再計算にあたっては、本調査の調査地点となったワードだけについて行っている。

まず、事業を実施したワードにおいて人々の関心（スコア）が高まり（開調と本調査のスコアの差がプラス）、それがさらに事業を実施していないワードにおける関心（スコア）の高まりより大きかった項目だけをソートした結果は下表のとおりである。プロジェクトの活動目標と合致する会議、開発、外界への意識、自然災害、政策等にかかる項目について関心が高まっていることが読み取れる。

(Unit: Score)

No.	Items of People's Concern	With Sub-project			Without Sub-project			Balance (With) - (Without)
		Present n=319	Before n=645	Balance	Present n=328	Before n=638	Balance	
		(1)	(2)	(3=1-2)	(4)	(5)	(6=4-5)	
1	Meeting on community deve.	74.9	69.3	5.6	75.3	77.2	-1.9	7.5
2	Labor force availability	58.4	54.5	3.9	57.6	61.0	-3.5	7.4
3	Watching movies	47.9	46.9	1.0	47.2	52.8	-5.6	6.6
4	Flood	73.8	68.0	5.8	67.6	67.3	0.3	5.5
5	Communication facilities	84.3	83.9	0.4	79.8	83.9	-4.2	4.6
6	Land slide and erosion	78.9	69.0	9.9	76.6	71.1	5.5	4.4
7	Political discussion	50.3	46.9	3.4	50.1	49.7	0.4	3.0
8	Family planning	52.8	49.4	3.4	53.3	51.0	2.3	1.1

次に、事業を実施したワードにおいて人々の関心（スコア）が低下し（開調と本調査のスコアの差がマイナス）、それがさらに事業を実施していないワードにおける関心（スコア）の低下より大きかった項目だけをソートした結果は次のとおりである。プロジェクトの活動で実施してきた内容と一致する道路、飲料水、薪の入手、現金収入、テラスの維持、森林保全といった項目について事業を実施していない住民と比較して関心が低下していることが伺える。

(Unit: Score)

No.	Items of People's Concern	With Sub-project			Without Sub-project			Balance (With) - (Without)
		Present n=319	Before n=645	Balance	Present n=328	Before n=638	Balance	
		(1)	(2)	(3=1-2)	(4)	(5)	(6=4-5)	
1	Foot trails	65.0	74.5	-9.6	71.6	73.3	-1.7	-7.8
2	Drinking water availability	64.5	77.0	-12.5	69.1	75.0	-6.0	-6.6
3	Fuelwood availability	71.7	83.1	-11.5	73.1	79.6	-6.5	-5.0
4	Food availability	79.4	86.7	-7.3	87.6	90.1	-2.5	-4.8
5	Fodder availability	67.9	81.2	-13.3	69.8	78.9	-9.1	-4.3
6	Cash income	85.8	94.5	-8.7	90.2	95.0	-4.8	-3.9
7	Maintenance of terrace	70.2	70.8	-0.6	70.4	68.2	2.2	-2.8
8	Forest resource	75.2	83.3	-8.2	75.4	81.4	-6.0	-2.1
9	Irrigation	76.5	87.8	-11.4	76.8	86.9	-10.1	-1.3
10	Crop productivity	78.3	84.7	-6.4	80.1	86.0	-5.9	-0.6

一方、事業を実施していないワードにおいて人々の関心（スコア）が高まり、それがさらに事業を実施しているワードにおける関心（スコア）の高まりより大きかった項目だけをソートした結果は次のとおりである。変化した項目の数も少なく、スコアの差も小さく、人々の関心の高まりは事業を実施したワードに比較すれば少ないといえる。

(Unit: Score)

No.	Items of People's Concern	With Sub-project			Without Sub-project			Balance (Without) - (With)
		Present n=319	Before n=645	Balance	Present n=328	Before n=638	Balance	
		(1)	(2)	(3=1-2)	(4)	(5)	(6=4-5)	
1	Education of myself	71.9	71.3	0.6	76.3	72.1	4.2	3.6
2	Electric supply	83.4	83.2	0.3	79.2	75.9	3.3	3.1
3	Maintenance of terrace	70.2	70.8	-0.6	70.4	68.2	2.2	2.8
4	Motable roads	93.0	92.8	0.2	89.3	88.8	0.5	0.3
5	Sanitation	52.1	43.8	8.3	57.4	48.8	8.7	0.3

さらに、事業を実施していないワードにおいて人々の関心（スコア）が低下し、それがさらに事業を実施しているワードにおける関心（スコア）の低下より大きかった項目だけをソートした結果は次のとおりである。事業を実施したワードにおいて関心が高まった項目も幾つかはいており興味深い。

(Unit: Score)

No.	Items of People's Concern	With Sub-project			Without Sub-project			Balance (Without) - (With)
		Present n=319	Before n=645	Balance	Present n=328	Before n=638	Balance	
		(1)	(2)	(3=1-2)	(4)	(5)	(6=4-5)	
1	Worship of God	54.0	66.8	-12.7	55.4	77.3	-22.0	-9.3
2	Education of children	72.3	78.3	-6.0	70.5	84.9	-14.3	-8.3
3	Meeting on community deve.	74.9	69.3	5.6	75.3	77.2	-1.9	-7.5
4	Labor force availability	58.4	54.5	3.9	57.6	61.0	-3.5	-7.4
5	Watching movies	47.9	46.9	1.0	47.2	52.8	-5.6	-6.6
6	Dance party	50.7	55.8	-5.1	51.0	62.0	-11.1	-6.0
7	Communication facilities	84.3	83.9	0.4	79.8	83.9	-4.2	-4.6
8	Festival	54.8	72.8	-18.0	58.5	79.4	-20.9	-2.8
9	Security	56.6	66.8	-10.3	57.3	68.0	-10.8	-0.5
10	Health	75.4	78.4	-2.9	74.5	77.6	-3.2	-0.3

(5) 自立能力向上

住民が自主的に村落資源の開発を行う場合、外部への関心が増大すると考え VDC やワード開発に係るラジオニュースに対する興味の有無について回答してもらった。結果では、事業を実施したワードで 98%、事業を実施していないワードで 96% の人達が「興味がある」と回答しており両者の差は僅かである。しかし、女性と職業カーストではその差は若干広がっている。さらに、友人や親戚と村落開発について話し合うのが好きかどうかを尋ねた結果も以上の結果と殆ど同じであった。村落開発に対する考え方は、事業を実施したワードの女性や職業カーストが僅かではあるがエンパワーされている可能性がある。

住民の森林保全に対する重要性の認識を知る目的で「友人や親戚と森林保全について時々話すことがあるか」という質問に対しては、事業を実施したワードで 95%、事業を実施していないワードで 92% の人達が「話すことがある」と回答している。この質問に対する回答は、女性（前者で 94%、後者で 92%）も職業カースト（同 95%、同 92%）も殆ど同じ傾向を示している。住民の森林保全に対する重要性の認識は、事業を実施したワードで僅かではあるが高まってきている可能性がある。

0-5. 結 論

本調査では住民のエンパワーメント達成度を「参加能力向上」、「共同作業能力向上」、「村落資源開発・保全意識の向上」、「自立能力向上」といった観点から調査・分析を行った。調査の結果では、こうした能力向上は事業を実施したワードの住民と事業を実施していないワードの住民との比較において全体では前者の方が僅かであるが優れていることが認められた。プロジェクト以外に大きなインパクトを住民に与えている活動が事業を実施したワードでなされていないと見られることから、こうした能力向上はプロジェクトによってもたらされたといえよう。

こうした能力向上を女性だけについて事業を実施したワードと事業を実施していないワードで比較した結果では、多くの質問項目において全体比較より大きな差が認められた。また、職業カーストだけの同様の比較においても同様の差が認められた。プロジェクトが特に留意して活動対象としてきた女性と職業カーストのエンパワーメント達成度が高いということは、この結果がそのままプロジェクトの成果として捉えることができる。

1. INTRODUCTION

This report presents the results of Impact Evaluation Survey made on the people in the rural community whose empowerment has been expected in the HMG/JICA Community Development and Forest/Watershed Conservation Project and HMG/JOCV Greenery Promotion Cooperation Project (hereinafter referred to as "the Project" in the lump). The Survey was carried out within about one month period from October 24 to November 24, 1998 by the JICA Short-term Expert with the assistance of the local consultant (MEH Consultants (P) Ltd.) hired by the Project.

1.1 Background of the Project

Upon the request of HMG Nepal, JICA agreed to conduct an extensive research study to identify an appropriate forestry program under HMG/JICA Forestry Extension Project (1991-1994). This project indicated that the sustainable management of natural resources without incorporating felt-needs of the local community would not succeed.

Thus, a package project has been decided to be implemented to contribute to the improvement of the land productivity and natural environment in the Hill areas of Kaski and Parbat Districts. The Package Project consists of:

- 1) HMG/JICA Community Development and Forest/Watershed Conservation Project (FY 1994/95-1998/99),
- 2) HMG/JOCV Greenery Promotion Cooperation Project (FY 1994/95-1998/99), and
- 3) HMG/JICA Development Study on Integrated Watershed Management in the Western Hills of Nepal (FY 1995/96-1997/98).

The overall goal of the Package Project is to improve the natural environment in the Nepal Hills through community resources development and conservation. The main objective is to improve the natural environment and land productivity, particularly to stop the depletion of forests and other natural resources and to expand the areas of greenery in the Hill areas of Kaski and Parbat districts by organizing exemplary community development activities for the upgrading of the living standards of the rural communities, promoting their own initiative and effort, and paying due consideration to women and poor people.

During the time frame of three years (1996-1998), the project implemented 643 sub-projects, spread over the five model areas (90 wards) of Kaski and Parbat districts. The sub-projects were implemented by the users' group themselves.

The sub-projects are being carried out under the following four (4) types of programs:

- 1) Forest/watershed conservation program,
- 2) Community infrastructure development program,

- 3) Income generation program, and
- 4) Training/capacity building program.

Implementation of sub-projects in participatory approach and involvement of community people in decision making process must have contributed positively in enhancing the participants knowledge, attitude and capability in understanding and implementing the sub- projects on their own.

1.2 Survey Objective

The objective of the survey is to evaluate to what extent the target rural people are empowered from a viewpoint of their capacity to develop and control appropriately and sustainably their community resources. The evaluation is carried out mainly through the comparison of their capacity between the wards with the sub-project and those without the sub-project. Beside, their capacity is also compared between the people who participated in the sub-project and not participated in the sub-project.

2. SURVEY METHODOLOGY

2.1 Survey Area

The areas subject to the Survey are five model areas of the Project: Parbat South, Kaski West, Kaski East, and Kaski North model areas (see Location Map). There are 43 VDCs and 307 wards in the survey areas as listed in Table 2.1.1. Among 307 wards, 89 wards shown in Table 2.1.2 were covered by the Project until mid-1998.

2.2 Definitions of Empowerment

The Project Purpose extracted from PDM is described as “a system for the community resources development/conservation in the community of rural people is built up through deployment of exemplary community development activities”. The Project Output also extracted from PDM is described as “a model of community resources development/ conservation through community development activities made by the rural people, as the main body, is established, and thus contributes to activate the community resources development/conservation”. According to these description, it is clear that the Project is, among others, aiming at empowerment of the rural people for the community resources development and conservation.

In the relevant project documents, however, what the Project has expected in the people's empowerment was not clearly specified. Therefore, the people's empowerment potentially expected by the Project was examined in the survey design so as to clarify the relations between the PDM's Project Purpose/Output and people's role and the people's empowerment expected

by the Project. As a result, the people's empowerment which would be achieved by the Project was defined as four (4) improvement levels, i.e. the improvement in i) capacity of participation, ii) capacity of cooperative works, iii) consciousness of resources development and forest conservation, and iv) capacity of self-reliance. The definition set at these four levels are presented in Table 2.2.1.

2.3 Contents of Questionnaire

The questionnaire was designed and prepared so as to clarify the above defined people's empowerment levels as follows:

People's Empowerment Expected by the Project	Principle Questions
Improvement in capacity of participation	<ul style="list-style-type: none"> - People's participation, speaking, and consciousness of participation in the ward meeting - Women's speaking ability and leadership in the ward meeting from men's viewpoints - Speaking ability and leadership of the occupational castes in the ward meeting from the other castes viewpoints - Understanding of existence of the system for preparation of minutes of meeting
Improvement in capacity of cooperative works	<ul style="list-style-type: none"> - Participation in the cooperative works for the ward development - Understanding of existence of the regulation for the cooperative works - Status of observance of regulation for the cooperative works - Understanding of cost sharing for the ward development - Understanding of participation of O&M and cost sharing for O&M
Improvement in consciousness of resource development and forest conservation	<ul style="list-style-type: none"> - Understanding of forest resources conservation and management carried out by the people - Understanding of afforestation activities carried out by the people in cooperative manner - Change in people's concern (to be compared with the results of Socio-economic Survey made in the Development Study)
Improvement in capacity of self-reliance	<ul style="list-style-type: none"> - Understanding of financial source for the ward development - Understanding of technical supporting source for the ward development - Interest in the VDC/ward development and forest conservation

The questionnaire used in the Survey is attached in Appendix A.

2.4 Sample Size

The sample size has been decided after due consideration of the time availability within the total survey period of one month and a number of experienced enumerators available for the field interview survey. In addition, an efficiency of enumerators in the field survey has also been taken into account. Since these have been evaluated, respectively, at 10 days in net, 20

enumerators and 3 samples per enumerator per day, the sample size of 600 have been decided before the commencement of survey.

However, actual sample size was 647 in the Survey, because a list of the sample respondents was prepared for the respective sample wards for a total of about 700 or about 118% of the above decided sample size. It was considered that the enumerators would face a difficulty in contact with the sample respondents, because of the paddy harvesting season where many respondents would be busy in their work during the survey period.

The relationship between the samples and population both for the wards and people is as shown below:

	Covered or Not Covered by the Project	Sample Size (Ward & People)	Population
Ward	Covered (or With Sub-project)	10	89 a/
- do.-	Not covered (or Without Sub-project)	10	218 a/
Total		20	307 a/
People	Covered (or With Sub-project)	319	9,000 b/
- do.-	Not covered (or Without Sub-project)	328	2,1000 b/
Total		647	30,000 b/

Note: a/; Based on the project documents until May 1998,
b/; Estimates based on the Socio-economic Baseline data, 1995/96.

2.5 Sampling Method

Two-stage sampling method was adopted to the sample design, i.e. sampling of wards in the first stage and another sampling of people in the second stage. The decided number of sample wards was 10 for both types of wards, with and without sub-project as shown in Table 2.5.1. The location of each sample wards are illustrated in Figures from 2.5.1 to 2.5.5. The sampling of people was made based on the list of sample people in the previous Household Member Survey in the Socio-economic Baseline Survey which was carried out in 1995/96 (during the period from June 9 to May 25, 1996 for the field interview survey). Random sampling method was adopted for both the sampling of the wards and sample people. Since the people sampled in the previous Household Member Survey were all more than 17 years old, the sample people in the Survey become also more than 17 years old. The sample wards with the number of sample people are listed as shown in Table 2.5.2.

2.6 Survey Organization

The survey team was organized under the JICA Short-term Expert. Other experts from the local

consultant were Socio-economist (15 days input), Rural Sociologist (27 days) and Database Analyst (20 days input). The Socio-economist and his assistant and the Rural Sociologist took responsibility for translation of questionnaire into Nepali, training of 20 Enumerators (total 360 days input), pretest of questionnaire, supervision of field interview survey, checking of analysis results, etc. The Database Analyst was responsible for computer data input, database establishment, data analysis with the assistance of three Computer Operators (total 57 days input). The JICA Short-term Expert was responsible for the overall survey design, survey supervision, dummy table preparation, evaluation of survey results, etc.

Before the field interview survey, the two days orientation training was organized for the enumerators covering the survey objective, practical methods of interview for data collection, contents of the questionnaire, communication methods among the study team, etc. The orientation training schedule is as given in Table 2.6.1, and the list of 20 enumerators are presented in Table 2.6.2.

For the field survey, they were divided into four groups, each consisting of five member enumerators. The Rural Sociologist and the Assistant Rural Sociologist took responsibility for supervision of the enumerators so as to collect correct information. To maintain the quality of data collection, they checked filled questionnaire either in the field or in the site office (Kushma/Pokhara). In many occasions the enumerators were asked to verify unrealistic information and collect the missing figures immediately. The questionnaires were received in regular interval at the Kathmandu office of local consultant in through a runner.

2.7 Data Processing

Microsoft's Visual FoxPro (VFP version 5), a database software, was used to store and analyze the survey data. The data was arranged in terms of with and without the project activities, locations (wards and districts), and sex and ethnic background of the sample people.

A project management file in VFP was developed named "*JICAIMP.PJX*". In the project file, a database named "*PJ_IMP.DBC*" was made which contains a number of tables. The main database tables in the Impact Evaluation Survey table was named "*IMPSAMP.DBF*". The other database table is "*J2M_IMP.DBF*" which was derived from "*JICA2MALL.DBF*" (HH member survey from Development Study) and contains only the selected VDC/Wards of the Impact Evaluation Survey.

Input form was developed for data entry in VFP and the name of the file is "*JI_INPUT.SCX*". The input form can also be used to add records, edit records and go to previous or next records. The input form has also validity criteria for codes of various numerical fields so that the computer operators will not be able to enter codes more then the maximum code number.

After completing the data entry of all the samples, various checks were made so that the data entered was correct. For example if there were zero values, the original questionnaires were

checked for the correct values. Other cross checks was also made for answers where they were not required. An example questionnaire for only males was not required for females.

Dummy tables were developed for processing the results from the questionnaire samples. These dummy tables were then saved in Microsoft Excel Workbooks in different sheets. The main data processed by VFP (mainly counting samples for various filters and some averages) was saved in "Main" sheet and other Chi-square test calculations in "Analysis" sheet.

Programs were developed to calculate data for the above dummy tables from files *TG_01.PRG* to *TG_06.PRG* and *TG_HH.PRG* for general information and *TD_01.PRG* to *TD_37.PRG* (*TD_17.PRG* not required) for the rest of the questions. The data thus calculated was automatically transferred to Excel dummy files from the program code.

The list of program names is given in Appendix B, Database.

2.8 Data Analysis

Simple statistical tools such as mean, percentage, frequency were employed during data analysis. The analysis was performed through cross tabulation to explore the relation between different variables such as respondents capacity to take part in meetings, capability to cooperate, etc. between participant and non-participant respondents. Chi-square test in employed in order to check variable is indeed significantly different for participants form those of non-participant respondents.

The first phase of the data analysis was carried out using counts and averages for various conditions (filters) by VFP programs operating on the survey data. Further analysis was carried out from the above counting saved in spread sheets (Excel) files mainly in "Main" sheet title.

Further analysis consists of calculation of Score values for Peoples concern question No. 4.3.

$$\text{Score Value} = (5 * C1 + 4 * C2 + 3 * C3 + 2 * C2 + 1 * C5) * 100 / T / 5$$

Where

T = Total Samples

C1 = Choice 1

C2 = Choice 2

C3 = Choice 3

C4 = Choice 4

C5 = Choice 5

Where Choice 1 has been given the highest weighted to 5 and Choice 5 the lowest weighted to . The Scores varies from 0 to 100.

Another analysis is the Chi-square test in a 2 x 2 table. The general format of the form is given below:

Item	Yes	No
With Sub-project	a	b
Without Sub-project	c	d

$$\text{Chi-square} = \frac{(a+b+c+d) * (a*d - c*b)^2}{(a+b)*(c+d)*(a+c)*(b+d)}$$

The value of Chi-square less than 3.841 shows that the data samples between with Sub-projects and without Sub-projects is not significant (with 5% level of significance). Chi-square values greater than 3.841 to infinity show a marked significance.

The chi-square value is not sensitive to small samples less than 10. Since our sample is comparatively small data for various conditions may come to less than 10 counts. In such cases the result of the Chi-square test should not be taken at face value¹.

Also if any of the value (a+b) or (c+d) or (a+c) or (b+d) is zero the Chi-square values gives infinity. In the computer calculations, it gives an error of "DIVISION by ZERO".

Chi-square Tests have been carried out between the following:

- With Sub-projects and Without Sub-projects
- Participated and Not Participated
- Male and Female
- Occupational and Other Castes

The detailed results of chi-square tests are all presented in the DATA BOOK.

3. SURVARY RESULTS

3.1 Composition of Samples

Q-1 General information on enumerators such as sex, age, caste, education occupation, etc.
Based on the answers, the respondents are grouped in terms of sex, age groups, caste groups, occupational groups, etc. The table below summarizes the results.

¹ For such cases, although it has not been calculated in the Survey due to the time limitation, the Yates analysis should further be carried out in which the Chi-square value is modified by n/2 as follows.

$$\text{Chi-square (Yates)} = \frac{(a+b+c+d) * (a*d - c*b - n/2)^2}{(a+b) * (c+d) * (a+c) * (b+d)}$$

Composition of Samples

	With Sub-project						Without Sub-project	
	Participated		Not Participated		Total or Ave.		(No.)	(%)
	(No.)	(%)	(No.)	(%)	(No.)	(%)		
Total Samples	284	100.0	35	100.0	319	100.0	328	100.0
Sex								
1) Male	105	37.0	10	28.6	115	36.1	125	38.1
2) Female	179	63.0	25	71.4	204	63.9	203	61.9
Caste Group								
1) Occupational Castes	67	23.6	8	22.9	75	23.5	87	26.5
2) Other Castes	217	76.4	27	77.1	244	76.5	241	73.5
Age Group								
1) < 25	41	14.4	12	34.3	53	16.6	57	17.4
2) 25 - 55	233	82.0	23	65.7	256	80.3	260	79.3
3) > 55	10	3.5	0	0.0	10	3.1	11	3.4
Occupation								
1) Farmer	239	84.2	27	77.1	266	83.4	269	82.0
2) Others	45	15.8	8	22.9	53	16.6	59	18.0
Education								
1) No Formal Education	163	57.4	16	45.7	179	56.1	172	52.4
2) Up to 10 Classes	96	33.8	17	48.6	113	35.4	119	36.3
3) Others	25	8.8	2	5.7	27	8.5	37	11.3
Member of Organization								
1) Member	185	65.1	33	94.3	218	68.3	210	64.0
2) Non-member	99	34.9	2	5.7	101	31.7	118	36.0

Source: Tables from GT-02 (Q1.1) to GT-07 (Q1.6) in DATA BOOK

In overall, it can be said that the samples are well randomly distributed for the comparison between the wards with and without sub-project. However, the samples for the non-participants are considerably small for the comparison between the participants and non-participants as seen the table above. The comparison between the participants and people in the wards without sub-project is considered to be useful for the measurement of differences between these groups.

3.2 Capacity of Participation

3.2.1 Participation in Ward Meeting

Q-2.1 Do you usually participate in a meeting held in your ward for the discussion of ward development or natural resources conservation? (Y/N)

Because of the project activities being carried out in the participatory manner, the people's participation in the meeting is considerably high and the answers of "yes" are 77% in the wards with sub-project, while that are only 56% in the wards without sub-project. Such difference is statistically significant according to the result of chi-square test. Both the male and female in the wards with sub-project show the higher participation than them in the wards without sub-project. In both types of the wards, the participation is higher in male than female. In the male, the answers of "yes" are 83% in the wards with sub-project and 71% in the wards without sub-

project, and in the female, the answers of "yes" are 73% in the wards with sub-project and 46% in the wards without sub-project. In the comparison of the caste groups, the participation of occupational castes is lower both in the wards with sub-project (69% of "yes") and without sub-project (48% of "yes") comparing to that of other castes in the wards with sub-project (79% of "yes") and without sub-project (59% of "yes"). (See Table 3.2.1).

Q-2.2 (Only for the respondents who answered "Yes" in Q-2.1) ; Do you positively speak your opinion in the meeting ? (Y/N)

The answers of this question may indicate the people's positiveness in participation. In overall, small difference is found between the answers from the wards with sub-project (90% of "yes") and those without sub-project (88% of "yes"), although such difference is not statistically significant. The differences are also small in the other comparisons between the male (96% of "yes" in the wards with sub-project and 91% of "yes" in the wards without sub-project) and female (87% in the same and 85% in the same) and other castes (90% in both types of wards). However, although samples are very small at only 52 in the wards with sub-project and 42 in the wards without sub-project, a certain difference is found in the comparison made on occupational castes showing 92% of "yes" in the wards with sub-project and 81% of "yes" in the wards without sub-project. This percentage is more large in the participants (94%). It can be evaluated that the project impact on the occupational castes is considerably high and their capacity of positive speaking has possibly been improved. (See Table 3.2.2).

Q-2.3 (Only for the respondents who answered "No" in Q-2.1) ; Please tell us why you don't participate in the meeting ? (Enumerator should evaluate the respondents' answer and select one reason from below listed supposed items.)

Code for answer

1. *Because of gender (e.g. because I am a women.)*
2. *Because of caste (because I belong to occupational caste.)*
3. *Because of poverty (e.g. because I am poor .)*
4. *Because of age (e.g. because I am too young or too old.)*
5. *Because of no invitation (e.g. because I was not invited)*
6. *Because of time (e.g. because I am too busy.)*
7. *Because of ability (e.g. because I have no ability.)*
8. *No interest (e.g. because I have no interest to attend such a meeting.)*
9. *Others*

In the wards with sub-project, 46% of the answers are the "time reason", followed by 22% in the "no invitation" and 11% in the "ability". This order is the same in the wards without sub-project with the percentages of 39%, 22% and 10%, respectively. One interesting difference in the comparison of with and without sub-project is found in the reason of "poverty", i.e. 3% in the wards with sub-project and 8% in the wards without sub-project. This difference is more large in the male respondents, i.e. 0% in the wards with sub-project and 11% in the wards without sub-project. There is some possibility that the people's aspect on poor people is changing due to the Project, although it may be very small. (See Table 3.2.3).

Q-2.4 *Do you think that you better participate in such a meeting, if you are invited ? (Y / N)*

The people's intention to participate in the ward meeting is similar for both people in the wards with sub-project (93% of "yes") and without sub-project (91% of "yes"), slightly higher in the former group, but there is no statistical significance between them. The other comparisons made on the male (97% of "yes" in the wards with sub-project and 94% of "yes" in the wards without sub-project), female (91% in the same and 90% in the same), and other castes (94% in the same and 90% in the same) also show the similar tendencies. However, a certain difference is found in the comparison made on occupational castes, i.e. 89% of "yes" in the wards with sub-project and 94% of "yes" in the wards without sub-project. It may be possible that the occupational castes are feeling some difficulty in participation to the sub-project. (See Table 3.2.4).

Q-2.5 *(Questions only for male respondents) ; Do you think that women in your ward will positively speak their opinions in such a meeting, if they are invited ? (Y / N)*

This evaluation is made from the viewpoint of the male, and there is a significant difference between the wards with and without sub-project, i.e. the answers of "yes" are 93% in the wards with sub-project and 75% in the wards without sub-project. The results are similar in other comparisons made on the occupational castes (88% of "yes" in the wards with sub-project and 56% of "yes" in the wards without sub-project) and other castes (95% in the same and 83% in the same). It can be said that the male in the wards with sub-project evaluate the women's ability in this aspect more positively than they do in the wards without sub-project. (See Table 3.2.5).

Q-2.6 *(Questions except for people belong to Occupational Castes); Do you think that people belong to the Occupational Castes will positively speak their opinions in such a meeting, if they are invited ? (Y / N)*

This is evaluated from the viewpoint of the other castes, and there is no significant difference between the wards with and without sub-project, i.e. the answers of "yes" are 81% in the wards with sub-project and 79% in the wards without sub-project. The results are similar in other comparisons made on male (82% of "yes" in the wards with sub-project and 83% of "yes" in the wards without sub-project) and female (80% in the same and 77% in the same). (See Table 3.2.6).

Some interesting results are found in the comparison made on the participants and non-participants. In overall (other castes), the percentages of "yes" are 81% in both the participants and non-participants. However, these percentages are different conversely in the female participants (79%) and the female non-participants (89%), and thus these percentages become 84% in the male participants and 67% in the male non-participants. Although the samples are too small for the evaluation, there are some possibility, as the project effect, that the male participants have positively changed their views for the occupational castes. (See Table 3.2.6).

3.2.2 Ability of Leading a Meeting

Q-2.7 Do you think that you have an ability to lead such a meeting (e.g. as a chairman)? (Y/N)

The difference is small in this answer between the wards with the sub-project (57% of "yes") and without project (52% of yes). In the male respondents, however, this difference is considerably large with the statistical significance, i.e. 83% of "yes" in the wards with sub-project and 70% of "yes" in the wards without sub-project. The similar tendency is also found in the occupational castes with the statistical significance, i.e. 57% of "yes" in the wards with sub-project and 40% in the wards without sub-project. However, significant differences are not found in other comparisons made on the female (43% of "yes" in the wards with sub-project and 41% of "yes" in the wards without sub-project) and other castes (57% in same and 56% in the same). In terms of capacity of leading a meeting, it can be said that male and occupational castes are well empowered in the wards with sub-project. (See Table 3.2.7).

The difference is considerably large between the participants (59% of "yes") and non-participants (43% of "yes") with the statistical significance. The similar differences are also found in the comparison made on the male (84% of "yes" in the participants and 70% in the non-participants), female (45% in the same and 32% in the same), occupational castes (61% in the same and 25% in the same) and other castes (59% in the same and 48% in the same). However, the statistical significance in these comparisons are all unknown, because of very small samples in these groups. (See Table 3.2.7 and Fig. 3.2.1).

Q-2.8 (Only for the respondents who answered "No" in Q-2.7); Please tell us why do you think that you can't lead such a meeting. (Enumerator should evaluate the respondents' answer and select one reason from below listed supposed items.)

Code for answer

1. Because of gender (e.g. because I am a women.)
2. Because of caste (because I belong to occupational caste.)
3. Because of poverty (e.g. because I am poor .)
4. Because of age (e.g. because I am too young or too old.)
5. Because of education (e.g. because I am not educated)
6. Because of ability (e.g. because I have no ability.)
7. No interest (e.g. because I have no interest to attend such a meeting.)
8. Others

In the wards with sub-project, 54% of the reasons are in "education", followed by 16% in the "ability" and 9% in the "poverty". This order is the same in the wards without sub-project with the percentages of 45%, 16% and 13%, respectively. Other comparisons made on male, female, occupational caste and other castes show also the similar results with those made on the overall comparison. (See Table 3.2.8).

Although the answers are very small in non-participants (20 samples), some differences are found in the comparisons between the participants and non-participants in the reasons of "age"

(5% in the participants and 15% in the non-participants) and "interest" (4% in the participants and 15% in the non-participants). (See Table 3.2.8).

Q-2.9 (Questions only for male respondents); Do you think that women in your ward can lead such a meeting ?

Code for answer

1. Easily they can
2. Difficult, but they can
3. Difficult, and they can not

There is a certain difference in the thinking of male in this aspect between the wards with and without sub-project, i.e. the positive answers (code No.1 and 2) are 92% in the wards with sub-project, and those are 80% in the wards without sub-project. Such difference is more large in the comparison made on the occupational castes, i.e. the positive answers are 91% in the wards with sub-project and 59% in the wards without sub-project.

It is unknown whether the male's evaluation on women has been improved or women have actually been empowered in leading a meeting. In either case, however, it can be evaluated that the people particularly they belong to the occupational castes have been empowered for better situation in the wards with sub-project. (See Table 3.2.9 and Fig. 3.2.2).

Q-2.10 (Questions except for people belong to Occupational Castes); Do you think that people belong to Occupational Castes in your Ward can lead such a meeting ?

Code for answer

1. Easily they can
2. Difficult, but they can
3. Difficult, and they can not

There is no significant difference in the thinking of other castes in this aspect between the wards with and without sub-project, i.e. the positive answers are 77% in the wards with sub-project and 78% in the wards without sub-project. The results are similar in other comparisons made on male (78% in the wards with sub-project and 79% in the wards without sub-project) and female (76% in the same and 77% in the same). (See Table 3.2.10 and Fig. 3.2.3).

Q-2.11 Is there system of writing minutes of meeting in your ward ?

Code for answer

1. Yes
2. No
3. I don't know.

In overall, the differences between the wards with and without sub-project are considerably large, i.e. the answers of "yes" are 78% in the wards with sub-project and 68% in the wards without sub-project with statistical significance. Such significance is also found in the comparison made on female (78% of "yes" in the wards with sub-project and 66% of "yes" in the wards without sub-project) and occupational castes (87% of "yes" in the same and 68% of "yes" in the same). (See Table 3.2.11).

3.3 Capacity of Cooperation

3.3.1 Overall Understanding of Cooperative Works

Q-3.1 Do you think that you have to participate in cooperative works for the development of ward, e.g. carrying stones and materials for the construction of water supply system ? (Y/N)

Many rural people think that they have to participate in the cooperative works, and the answers of "yes" are 99% in the wards with sub-project and 98% in the wards without sub-project. The difference between the people in these two types of wards is negligible.

On the other hand, small differences are found between the participants and non-participants; the answers of "yes" are nearly 100% in the participants and 91% in the non-participants. Such difference is more large in the comparison made on female, i.e. 99% in the participants and 88% in the non-participants. The similar difference is also found in the comparison made on the occupational castes (99% of "yes" in the participants and 75% of "yes" in the non-participants). (See Table 3.3.1).

3.3.2 Existence of Regulations for Cooperative Works and Its Understanding

Q-3.2 Do you think that your ward has a rule or regulation for the cooperative works ?

Code for answer

1. Yes
2. No
3. I don't know.

The difference is small in the comparison between the wards with and without the project, i.e. 84% of "yes" in the wards with sub-project and 80% of "yes" in the wards without sub-project. The difference is more large in the comparison made on male, i.e. 93% of "yes" in the wards with sub-project and 81% of "yes" in the wards without sub-project. However, the difference is very small in the comparison made on female, i.e. 79% of "yes" in the wards with sub-project and 80% of "yes" in the wards without sub-project. According to these results, it can be said that the people's awareness of the existence of regulation is better in the wards with sub-project, and among them, the male are superior to the female. (See Table 3.3.2).

Q-3.3 (Only for the respondents who answered "Yes" in Q-3.2); Do you think that your ward people are well keeping such a rule or regulation ?

Code for answer

1. Yes
2. No
3. I don't know.

The difference between the wards with and without sub-project is small, i.e. 93% of "yes" in the wards with sub-project and 90% of "yes" in the wards without sub-project. In other comparisons made on the male and female show the similar tendencies. However, the difference is more large in the comparison made on the occupational castes, i.e. 95% of "yes" in the wards with sub-project and 86% of "yes" in the wards without sub-project, and thus the

difference is negligible in the other castes, 92% of "yes" in both types of wards with and without sub-project. This result may indicate better involvement of the occupational castes in the cooperative works in the wards with sub-project. (See Table 3.3.3).

3.3.3 Understanding of Cost Sharing and Voluntary Works

Q-3.4 Do you think that you have to share some portion of construction cost for the development of your ward, if it is small amount for you ? (Y/N)

Many answers are positive both in the wards with and without sub-project, and the answers of "yes" are 98% in the wards with sub-project and 96% in the wards without sub-project. The difference between the people in these wards is negligible. The difference is not found also in the comparison between the participants and non-participants, 98% of "yes" in the participants and 97% of "yes" in the non-participants. Any significant differences are found in other comparisons made on the male, female, occupational castes and other castes. (See Table 3.3.4).

Q-3.5 Do you think that you have to participate in cooperative works for the Operation and Maintenance (O&M) of the community facilities ? (Y/N)

No significant differences are found between the people in the wards with sub-project and without sub-project and between the participants and non-participants. All the answers are positive with nearly 100% of "yes". Small difference is found between the occupational castes in the wards with sub-project (99% of answers are "yes") and in the wards without sub-project (97% of answers are "yes"), although there is no statistical significance in this difference. (See Table 3.3.5).

Q-3.6 Do you think that you have to pay for O&M cost (e.g. repair works which need budget) ? (Y/N)

The answers are "yes" from 99% of people in the wards with sub-project, while those are 95% in the wards without sub-project. The difference is more large in female, i.e. 99% of "yes" in the wards with sub-project and 93% of "yes" in the wards without sub-project probably with a certain statistical significance. The similar difference is also found between the occupational castes in the wards with sub-project (99% are "yes") and without sub-project (94% are "yes"). There are no significant differences in the comparison made between the participants and non-participants. (See Table 3.3.6 and Fig. 3.3.1).

3.4 Consciousness of Resource Development and Forest Conservation

3.4.1 Understanding of Forest Conservation

Q-4.1 Is it understandable for you that the Ward people, as a main body, have to take care of forest resources instead of the Government ? (Y/N)

Almost all the answers are "yes" in this question either they belong or not belong to the wards with sub-project. The most of answers from the participants and non-participants are also

positive and no significant differences are found between these two groups. Accordingly, it can be evaluated that the people's consciousness of forest conservation instead of the Government is quite high in the whole model area. (See Table 3.4.1).

Q-4.2 Do you think that you have to participate in cooperative works for tree planting, weeding, etc. even without recompense? (Y/N)

All the answers are similar with those in Q-4.1, and it can be evaluated that the people's consciousness of participation in the forest management is considerably high in the whole model area. (See Table 3.4.2).

3.4.2 Changes of People's Concerns

Q-4.3 Present concerns and collective actions related to them

In this question, the levels of people's concern on the selected 28 items have been confirmed with the respondents. The survey results are compared with those obtained from the socio-economic survey of the development study in which the field interview survey was conducted during the January – May, 1996 period (about 2.5 years' ago).

In order to make simple presentation here, the score of each item was calculated for overall figures for both the data from this survey and from the development study, although the calculation has been made for male and female in the development study. The results of such calculation of scores for overall figures are presented in Table 3.4.3. The calculation for the data from the development study was made for the same wards selected in this survey. Beside the presentation made in this section, the scores calculated for male and female based on this survey results are presented in DATA BOOK in detail together with those obtained from the development study.

The analysis has been made by sorting the items of people's concerns based on scores calculated for both types of wards with and without sub-project.

The items of people's concerns which scores are increased in the wards with sub-project (the balance of scores between this survey and the development study is positive) and such positive changes are larger than those in the wards without sub-project are as shown in the table below. As seen in the table, the people's concerns in the wards with sub-project are heightened in meeting on community development, consciousness of outer world, natural disaster, political discussion, etc. These items are all accord with the project activities.

**Positive Changes of People's Concerns in the Wards With Sub-project
in Comparison with Those in the Wards Without Sub-project**

(Unit: Score)

No.	Items of People's Concern	With Sub-project			Without Sub-project			Balance (With) - (Without) (7=3-6)
		Present n=319	Before n=645	Balance (3=1-2)	Present n=328	Before n=638	Balance (6=4-5)	
		(1)	(2)	(3=1-2)	(4)	(5)	(6=4-5)	
1	Meeting on community deve.	74.9	69.3	5.6	75.3	77.2	-1.9	7.5
2	Labor force availability	58.4	54.5	3.9	57.6	61.0	-3.5	7.4
3	Watching movies	47.9	46.9	1.0	47.2	52.8	-5.6	6.6
4	Flood	73.8	68.0	5.8	67.6	67.3	0.3	5.5
5	Communication facilities	84.3	83.9	0.4	79.8	83.9	-4.2	4.6
6	Land slide and erosion	78.9	69.0	9.9	76.6	71.1	5.5	4.4
7	Political discussion	50.3	46.9	3.4	50.1	49.7	0.4	3.0
8	Family planning	52.8	49.4	3.4	53.3	51.0	2.3	1.1

The items of people's concerns which scores are decreased in the wards with sub-project (the balance of scores between this survey and the development study is negative) and such negative changes are larger than those in the wards without sub-project are as shown in the table below. The people's concerns in the wards with sub-project are lowered in foot trails, drinking water availability, fuelwood availability, etc. These items are all consistent with the project components.

**Negative Changes of People's Concerns in the Wards With Sub-project
in Comparison with Those in the Wards Without Sub-project**

(Unit: Score)

No.	Items of People's Concern	With Sub-project			Without Sub-project			Balance (With) - (Without) (7=3-6)
		Present n=319	Before n=645	Balance (3=1-2)	Present n=328	Before n=638	Balance (6=4-5)	
		(1)	(2)	(3=1-2)	(4)	(5)	(6=4-5)	
1	Foot trails	65.0	74.5	-9.6	71.6	73.3	-1.7	-7.8
2	Drinking water availability	64.5	77.0	-12.5	69.1	75.0	-6.0	-6.6
3	Fuelwood availability	71.7	83.1	-11.5	73.1	79.6	-6.5	-5.0
4	Food availability	79.4	86.7	-7.3	87.6	90.1	-2.5	-4.8
5	Fodder availability	67.9	81.2	-13.3	69.8	78.9	-9.1	-4.3
6	Cash income	85.8	94.5	-8.7	90.2	95.0	-4.8	-3.9
7	Maintenance of terrace	70.2	70.8	-0.6	70.4	68.2	2.2	-2.8
8	Forest resource	75.2	83.3	-8.2	75.4	81.4	-6.0	-2.1
9	Irrigation	76.5	87.8	-11.4	76.8	86.9	-10.1	-1.3
10	Crop productivity	78.3	84.7	-6.4	80.1	86.0	-5.9	-0.6

On the other hand, the items of people's concerns which scores are increased in the wards without sub-project (the balance of scores between this survey and the development study is positive) and such positive changes are larger than those in the wards with sub-project are as shown in the table below. As seen in the table, the number of items of people's concerns is small and the balance of scores between with and without sub-project is also small. Thus, it can be said that the positive changes of people's concerns have been negligible in the wards without sub-project.

**Positive Changes of People's Concerns in the Wards Without Sub-project
in Comparison with Those in the Wards With Sub-project**

(Unit: Score)

No.	Items of People's Concern	With Sub-project			Without Sub-project			Balance (Without) - (With) (7=6-3)
		Present n=319	Before n=645	Balance	Present n=328	Before n=638	Balance	
		(1)	(2)	(3=1-2)	(4)	(5)	(6=4-5)	
1	Education of myself	71.9	71.3	0.6	76.3	72.1	4.2	3.6
2	Electric supply	83.4	83.2	0.3	79.2	75.9	3.3	3.1
3	Maintenance of terrace	70.2	70.8	-0.6	70.4	68.2	2.2	2.8
4	Motable roads	93.0	92.8	0.2	89.3	88.8	0.5	0.3
5	Sanitation	52.1	43.8	8.3	57.4	48.8	8.7	0.3

Moreover, the items of people's concerns which scores are decreased in the wards without sub-project (the balance of scores between this survey and the development study is negative) and such negative changes are larger than those in the wards with sub-project are as shown in the table below. It is interesting that some items of people's concerns in the table are heightened in the wards with sub-project. However, the reasons of such negative changes in the wards without sub-project are unknown.

**Negative Changes of People's Concerns in the Wards Without Sub-project
in Comparison with Those in the Wards With Sub-project**

(Unit: Score)

No.	Items of People's Concern	With Sub-project			Without Sub-project			Balance (Without) - (With) (7=6-3)
		Present n=319	Before n=645	Balance	Present n=328	Before n=638	Balance	
		(1)	(2)	(3=1-2)	(4)	(5)	(6=4-5)	
1	Worship of God	54.0	66.8	-12.7	55.4	77.3	-22.0	-9.3
2	Education of children	72.3	78.3	-6.0	70.5	84.9	-14.3	-8.3
3	Meeting on community deve.	74.9	69.3	5.6	75.3	77.2	-1.9	-7.5
4	Labor force availability	58.4	54.5	3.9	57.6	61.0	-3.5	-7.4
5	Watching movies	47.9	46.9	1.0	47.2	52.8	-5.6	-6.6
6	Dance party	50.7	55.8	-5.1	51.0	62.0	-11.1	-6.0
7	Communication facilities	84.3	83.9	0.4	79.8	83.9	-4.2	-4.6
8	Festival	54.8	72.8	-18.0	58.5	79.4	-20.9	-2.8
9	Security	56.6	66.8	-10.3	57.3	68.0	-10.8	-0.5
10	Health	75.4	78.4	-2.9	74.5	77.6	-3.2	-0.3

The above analysis made on the changes of people's concern can be concluded as follows:

- 1) In the wards with sub-project, the people's concerns are heightened in, among others, the meeting on community development and natural disaster which importance has been educated by the project through participatory approach. This result may therefore indicate that the people in the wards with sub-project have been empowered in terms of community development and natural conservation to a certain extent.
- 2) Also in the wards with sub-project, the people's concerns are lowered in, among others, the foot trails and drinking water availability which development has been carried out by themselves under the Project. Their

anxiety in these aspects may be lightened because of the project activities which have improved physically these facilities to a certain extent.

3.5 Capacity of Self-reliance

Q-5.1 If cost for the development is too expensive to the ward people even you shared some cost, where do you think you have to go to ask for a fund ?

Code for answer

1. Government administration (Ward, VDC and District)
2. Foreign aid organization
3. Nepali's aid organization (including NGO)
4. No answer (respondent can not answer)
5. Others

The people's answers are the highest in the selection of code No. 1 in both the wards with (77%) and without sub-project (84%), followed by the code No. 2 also in both the wards with (16%) and without sub-project (7%). The selection of code No. 3 is negligible in both the wards with (0%) and without sub-project (2%). Because of the project activities, the people's expectation probably has become higher in the foreign aid organization as a financial source in the wards with sub-project. While, in the wards without sub-project, the people don't have approach to the foreign aid organization in general, and thus the people's selection in code No. 2 is small in percentage. Two interesting results are drawn from the comparison made on female and occupational castes. The female who selected the foreign aid organization are 20% in the wards with sub-project, but they are only 7% in the wards without sub-project. Similarly, the occupational castes who selected code No. 2 are 16% in the wards with sub-project and 7% in the wards without sub-project. These are also considered to be the project effect, because the project activities are on-going paying due consideration to female and occupational castes. (See Table 3.5.1).

In the comparison made between the participants and non-participants, the answers are also the highest in the selection of code No. 1, followed by the code No. 2 in both the groups. Some interesting results are found in the selection of code No. 4 which is considerably higher in the non-participants (14%) comparing to that in the participants (4%). Such difference is more clearly observed in the comparison made between the female participants (6%) and the female non-participants (20%) and between the occupational castes' participants (4%) and occupational castes' non-participants (25%). This interesting result may indicate that the participants' positiveness (particularly in female and occupational castes) for the community development has been improved because of the project activities. (See Table 3.5.1).

Q-5.2 Where do you think you have to go to ask for a technical assistance for the community forest conservation ?

Code for answer

1. Government administration (Ward, VDC and District)
2. Foreign aid organization
3. Nepali's aid organization (including NGO)

4. *No answer (respondent can not answer)*
5. *Others*

The answers to this question are all very similar with those to the above Q-5.1. (See Table 3.5.2).

Q-5.3 Do you have an interest in the radio news concerning VDC/Ward development ? (Y/N)

Many people have an interest in the radio news in both the wards with and without sub-project, and the answers of "yes" are 98% in the wards with sub-project and 96% in the wards without sub-project. The difference is quite small in this overall comparison. Slightly larger difference is found in the comparison made on female, i.e. 98% of "yes" in the wards with sub-project and 95% of "yes" in the wards without sub-project. The similar difference is also found in the comparison made on occupational castes, i.e. 97% of "yes" in the wards with sub-project and 92% of "yes" in the wards without sub-project. The statistical significance is unknown in these two comparisons, since the answers of "no" is too small to calculate chi-square value. However, it can be said that, as the project effect, the people in the wards with sub-project (particularly in the female and occupational castes) have a slightly higher interest in their community development than the people in the wards without sub-project. (See Table 3.5.3).

Q-5.4 Do you like to discuss about VDC/Ward development with your friends or relatives ? (Y/N)

The people's answers are nearly the same with those from Q-5.3, and the similar results are drawn in the comparison between the wards with and without sub-project. (See Table 3.5.4 and Fig. 3.5.1).

Q-5.5 Do you sometimes discuss about the needs of forest conservation with your friends or relatives ? (Y/N)

The answers to this question may indicate the people's understanding of importance of forest conservation. The results show that the people's understanding is slightly higher in the wards with sub-project (95% of "yes") than that in the wards without sub-project (92% of "yes"). The similar differences are also found in the comparisons made on female and occupational castes. In the comparison of female, the answers of "yes" are 94% in the wards with sub-project and 89% in the wards without sub-project, and in the comparison of occupational castes, the answers of "yes" are 91% in the wards with sub-project and 86% in the wards without sub-project. It can be evaluated that the people's understanding of importance of forest conservation has been heightened slightly in the wards with sub-project due to the project activities. (See Table 3.5.5).

The difference is also small in the comparison made on the participants and non-participants, i.e. 95% of "yes" in the participants and 91% of "yes" in the non-participants. The largest difference, although it is still small, is found in the comparison made on male, i.e. 97% of "yes" in the participants and 90% of "yes" in the non-participants. Most probably, these

differences have also been brought by the Project. (See Table 3.5.5).

Q-5.6 What kind of support do you think the most important when you and your ward people develop your ward. (Choose up to 3 important code numbers with priority.)

Code for answer

- 1. Fund*
- 2. Materials*
- 3. Engineering technique*
- 4. Management technique*
- 5. Marketing information*
- 6. Others*

This question has been designed to know the degree of requirement and importance of various external supports when the people themselves develop their community. Accordingly, this question was not made for the clarification of the degree of empowerment achieved by the people.

As a result, the people's requirement for the external support is the highest in the "fund", followed by "materials", "engineering technique", and "management technique". The people who selected the "marketing information" in the top three priorities are quite small in number. The answers are all similar even they are compared between the wards with and without sub-project, male and female, and occupational castes and other castes. (See Table 3.5.6).

3.6 Other Information

Q-6.1 (This question is only for the respondents in the wards not covered by the Project); Do you know that the Project is on-going in Kaski and Parbat District? (Y/N)

This question has no direct relation to the clarification of people's empowerment. However, this question was made in order to know the people's background in the wards without sub-project; how much degree they are aware of the project activities carried out in the other wards.

Among the 328 samples in the wards without sub-project, 58% are aware of the Project and the remaining 42% are not aware of it. The people who know the Project are more large in the male respondents with 70% of "yes", while they are small in the female respondents with 50% of "yes". For the caste groups, the occupational castes who know the Project are 53%, and the other castes are 59%. The differences are statistically significant between the male and female, but not between the occupational castes and other castes. (See Table 3.6.1).

3.6.1 People's Participation in Sub-project

Q-6.2 (The questions below are only for the people in the wards covered by the Project.); Did you participate or are you participating in the Users' Group of Sub-Project? (Y/N)

This question has been made just for the grouping purpose. Based on the answers, the samples were divided into two, i.e. the participants and non-participants. The results were used in the analysis. (See Table 3.6.2).

Q-6.3 (The questions below are only for the respondents who answered "Yes" in Q-6.2.); What type of Sub-Project and how many Sub-Projects did you participate or are you participating ?

This question has been made in order to clarify the degree of people's participation in the sub-projects. As seen in Table 3.6.3, in overall, the participation rate is considerably high in the forest/watershed conservation program (83%). However, the participation rate is less than 50% in the income generation program (49%) and in the training/capacity building program (41%). On an average, one person participates about 2 sub-projects in the forest/watershed conservation program, 1.4 sub-project in the community infrastructure development program, 0.7 sub-project in the income generation program and 0.6 sub-project in the training/capacity building program.

The participation rates in the income generation program and training/capacity building program are better in the female (54% and 48%, respectively) than those in the male (41% and 30%). In the comparison between the occupational castes and other castes, the participation rates in the former group are better in the community infrastructure development program (78%), the income generation program (73%) and training/capacity building program (48%). (See Table 3.6.3).

3.6.2 People's Satisfaction with Sub-project

Q-6.4 How do you evaluate the Sub-Project as a whole ?

Code for answer

- 1. Very much satisfied*
- 2. Satisfied*
- 3. Not satisfied*

The most participants evaluate the sub-project positively, i.e. 35% are "very much satisfied", 61% are "satisfied" and 4% are "not satisfied". The answers of "very much satisfied" are the highest in the training/ capacity building program (37%), followed by the income generation program (37%), the community infrastructure development program (36%) and the forest/watershed conservation program (33%). (See Table 3.6.4 and Fig. 3.6.1).

The table below summarizes the answers of "very much satisfied" by the gender groups, caste groups and by programs. As it is clear in the table, the male and occupational castes are very much satisfied with the training/capacity building program, and the female and other castes are very much satisfied with income generation program. The forest/watershed conservation program shows the lowest in "very much satisfied" for female, occupational castes and other castes.

**Percentages of People's Answers with "Very Much Satisfied"
by Programs and Population Groups**

Name of the Program	Overall		Male		Female		Occup. Caste		Other Castes	
	Order	(%)	Order	(%)	Order	(%)	Order	(%)	Order	(%)
Training/ Capacity Building	1	36.8	1	48.4	3	32.6	1	43.8	2	34.1
Income Generation	2	36.7	4	34.9	1	37.5	2	40.8	1	34.4
Community Infrastructure	3	35.6	2	35.7	2	35.5	3	40.4	3	33.8
Forst/Watershed Concervation	4	32.8	3	35.5	4	31.0	4	39.2	4	31.0

Source: Table 3.6.4

Q-6.5 (Only for the respondents whose answer was "1" and "2" in Q-6.4); Who was a key person/organization in the successful implementation of the Sub-Project? Please select two answers.

Code for answer

- 1. Users' Group Members and member families*
- 2. Management Committee of Users' Group*
- 3. M/P Team*
- 4. Ward Administration*
- 5. VDC Administration*
- 6. Others*

About 45%² of the participants who "vary much satisfied" and "satisfied" have selected the M/P team as a key person/organization in the successful implementation of the sub-project. Other selections made by the participants are the users' group members and member families (24%), management committee of user's group (14%), ward administration (11%) and VDC administration (6%). This order is all the same in each program and in each population group (i.e. male, female, occupational castes and other castes). (See Table 3.6.5).

3.6.3 Self-confidence for the Development without Assistance from the Project

Q-6.6 Do you think that you and your Ward people can now start some projects without any support from the Project?

Code for answer

- 1. Yes*
- 2. No*
- 3. I don't know.*

As a whole, 49% of the answers are "yes" and 45% are "no". In the program-wise, the answers of "yes" are the highest in the training/capacity building program (54%), followed by the forest/watershed conservation program (50%) and income generation program (50%). In the population group-wise, the answers of "yes" are the lowest in the occupational castes (45%), particularly in the Training Program (41%). (See Table 3.6.6 and Fig. 3.6.2).

² The actual percentages shown in Table 3.6.5 and Tables from DT-32-A1(Q 6.5) to DT-32-A1(Q 6.5) in DATA BOOK are doubled for all the answer codes, because the selections were made for two answer codes in the questionnaires.

4. CONCLUSION

In the Survey, the people's empowerment has been studied and analyzed at the defined four (4) levels, i.e. the improvement in i) capacity of participation, ii) capacity of cooperative works, iii) consciousness of resources development and forest conservation, and iv) capacity of self-reliance. The survey results obtained from the overall analysis indicate that the people in the wards with sub-project have slightly been empowered at all these levels comparing to the people in the wards without sub-project. Since there have been no particular activities which may give impact to the people in the wards with sub-project, it can be evaluated that the people's empowerment has been brought by the project activities.

The people's empowerment is more clearly observed in female and occupational castes particularly in the capacity of participation and cooperative works, and some comparisons made between these people in the wards with and without sub-project are statistically significant. It can also be evaluated that such empowerment on female and occupational castes has been brought by the project activities which have been carried out paying due consideration to these people.