

ANNEXES

A
Report on
Baseline Situation of the Water Mills in Nepal 2012

Submitted to



Netherlands Development Organisation
Bakhundole, Lalitpur

Submitted by



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Annex 1: Targeted baseline districts, information and Methodologies

Category of Districts	Source	Information collected or verified	Methodology	Remarks
<p>Existing IWMP 30 Districts (Field Visit to get samples from 11 Districts with the following details:</p> <p>1.Far West Region Dadeldhura, Bajhang, Bajura, Doti, Darchula and Achham</p> <p>2.Mid West Region: Surkhet, Kalikot, Rukum and Rolpa</p> <p>3.Central Region: Makawanpur, Dolakha and Okhaldhunga</p>	<ul style="list-style-type: none"> • Data of IWMP • Baseline Survey Report 2008 • Service Centers/GOAs and Kit Manufacturers • IWM Annual Progress Reports • Different studies conducted by IWM stakeholders • File visit and interview with Mill Owners 	<p>General:</p> <ul style="list-style-type: none"> • # of TWMs operating • # of IWM (SS, LS, Electrification and other end uses) • Technical data of each IWM • # of households covered by per IWM/Electrification • Income generation of IWM owners through IWMs • # of Women IWM owner and involvement/IWM • The total # beneficiaries (family) and # of HHs • # of Mill visitors by gender including girl child and boy • # of GOAs, SCs, Kit Manufactures • Sector actors • Status of CDM situation, Policy Environment, R&D activities, GESI Policy and practices • Linkages with MFIs for financing IWMs including Electrification • Current capacity of IWM team, budget allocated and range of activities <p>GOA:</p> <ul style="list-style-type: none"> • # of GOAs, • Short description of each GOA depicting its operational structure and status • Major services or activities conducted last year. • The advocacy service/s rendered last year • Major sources of income that generated by the GOA last year. • Percentage of Total Income through selling the services. • GSI and GOA Governance including women and excluded social groups percentage in Membership and Executive Board <p>GOA Federation:</p> <ul style="list-style-type: none"> • Status of GOA Federation • Major bottlenecks in getting registered • Membership status and source of income • GSI and governance <p>Service Centre:</p> <ul style="list-style-type: none"> • # of Service Centres • General information-establishment and legal standing 	<ul style="list-style-type: none"> • Document Reviewed • Compiled available data • Verified through consultation with IWMP personnel • Consulted with Sector Actors 	

		<ul style="list-style-type: none"> • Nature of its operation eg does it wait for demand or how does it actually operate? • Major activities of Service Centre in last year • Number of people engaged in IWM related activities • Total income and percentage share from IWM related activities • Number of IWMs installed last year depicting SS,LS and IWM electrification • The relationship with Kit Manufactures and GOA (with MoU, sales contract or under which provision) • # of LS in stock • District coverage <p>Kit Manufacturers:</p> <ul style="list-style-type: none"> • # of Kit Manufacturers • General Information • Number of kits manufactured in last year depicting SS,LS and IWM Electrification • # in stock • Number of people engaged in IWM manufacturing • Percentage share of IWM Kits sales in total income of the firm • Information regarding if the IWMs sold to other than Programme Districts • Districts where kits were supplied • How the client relationship was maintained (with service centres in some case with GOA) 		
Targeted 3 IWMP Districts for further verifications (Sindhuli, Kavre and Dhading)	<ul style="list-style-type: none"> • Service Centers/GOAs and Kit Manufacturers • Data of IWMP • IWMP Annual Progress Reports • Different studies conducted by IWM stakeholders • Field Survey of Assignment Team 	<ul style="list-style-type: none"> • # of TWMs operating • # of IWM (SS, LS,) • Existing Electrification and other end uses including enterprises was verified during the need assessment workshop to be organized • Technical data of each IWM • Possibility of # of Electrifications including end use/enterprise • Existing Power Sources (Grid, Micro Hydro, Peltric and other RETs) • # of households covered by per IWM/Electrification • Income generation of IWM owners through IWMs • # of Women IWM owner and involvement/IWM • The total # beneficiaries (family) and # of HHs • # of Mill visitors by gender including girl child and boy 	<ul style="list-style-type: none"> • Document Reviewed • Compiled available data • Verified through consultation with IWMP personnel • Field verified with prepared survey questionnaire in annex 1 and Survey Checklist as attached in annex 2 • Consulted with Sector Actors 	

		<ul style="list-style-type: none"> • Sector actors • Linkages with MFIs for financing IWMPs including Electrification • In the case of GOA, Service Centers and Kit Manufactures, the team had the same information as mentioned for 30 districts in the table above. 		
Target 6 Districts non-IWMP Districts (Arghakhanchi, Sankhuwasabha, Lamjung, Khotang, Parbat and Gulmi)	<ul style="list-style-type: none"> • Data of IWMP • Baseline Survey Report 2008 • Field Survey of Assignment Team 	<ul style="list-style-type: none"> • # of TWMPs, their operational status & ownership, • Services provided, potential end uses and enterprises, • Possibility of MFIs linkages, • Technical data of TWMPs, economic status of TWMP owners etc. • Actors available • Operation of TWMP over the year 	<ul style="list-style-type: none"> • Interviewed 30 traditional watermill (TWM) owners, 60 users of TWM, key informants at least with 2 VDC Secretaries per district and 6 DEES/Us Officers of 6 mentioned non-IWMP Districts. 	<ul style="list-style-type: none"> • In Arghakhanchi, Parbat and Khotang, the assignment team coordinated with the existing SCs (Dhading and Okhaldhunga) and Field Facilitators of IWMP of adjacent districts to conduct the surevey • In Sankhuwasabha, Lamjung and Gulmi Districts, the Assignment Team visited and collected the data.

Annex 2: Survey Questionnaire

IWMs/TWMs Owners

1. Name of owner :
2. Gender:
3. Ethnic group which the mill owner belongs to:
4. Location :
 - a) Village :
 - b) VDC :
 - c) District :
 - d) No. of family members:
 - e) Occupation: Farming
3. Road head:
 - a) Name :
 - b) Type :
 - c) Distance to Site :
 - d) Walking Hours to Site:
4. How do you know about IWM/TWM?
5. Name of nearest Local Market (Bazaar) from mill:
 - a) Name :
 - b) Type :
 - c) Distance to Site :
 - d) Walking Hours to Site:
6. Annual income of mill owner:
7. The percentage of Mill income in the total income of the owner:
8. Type of ownership: Self: Community: Partnership:
9. If mill is on partnership, how many partners are there?
10. If mill is on partnership, what is the operational modality?
11. How many hours does mill operate in a day?
12. How many months does mill operate in a year?
13. How many households use mill? Name the community and no. of HHs:
14. Economical situation of mill users:
 - A. High B. Medium C. Low
15. What are the sources of income?
16. How many mills are there on 3 KM peripheral distance from your mill?
 - A. Nos. of IWM....
 - B. Nos. of TWM
17. Intake:
 - a) Intake Type:
 - b) Land Ownership:
18. Discharge:
 - i) Measured Flow:
 - ii) Date:
 - iii) Methodology Applied:
19. Power house Land Ownership:
20. Available Head (Gross):
21. Penstock Length:

- Penstock Diameter:
22. Headrace Canal:
a) Type:
b) Length:
c) Land Ownership:
23. Estimated Power Output:
24. Is there any possibility of electrification:
25. Interest of people on electrification and number of households.
26. What type of electrification is possible in community:
A. National grid B. Micro/ Pico hydro C. Other
27. No of Productive End-uses/ Enterprises: Type of end use:
28. Is there any MFI/Bank/cooperative which can provide loan for the electrification?
A. Yes B. No
29. If yes, details of MFI/Bank/cooperative
Name:
Location:
Village:
VDC:
District:

Service Users:

1. Name and address:
2. How frequently do you visit the mill for services?
3. For which service are you here for?
4. How far is your home from this site?
5. Do you think that IWM has saved your time? If no, why? If yes, answer the following;
1-2 hours
2-4 hours
4-5 hours

Service Centre

1. Name and address of Service Centre:
2. Type of Service Centre: NGO or Run under GOA
3. Main contact person:
4. When did you enter in this business?
5. How many people engaged in IWM related activities? (Full Time: Part Time:)
6. How many SS: LS with End use: Electricity: IWMs installed by your Service Centre last year?
7. Would you tell us about your annual income and percentage share of IWMs?
8. How do you maintain the relations with Kit manufacturer and GOAs?
9. Do you have any formal agreement with GOA or Kit Manufacturers? If yes, from how many years?
10. Do you install the kits after receiving order or do you keep stock and later you sell to SCs?

Kit Manufacturers

1. Name and address:
2. Main contact person:
3. When did you enter in business?
4. What types of manufacturing activities you is undertaking other than IWMs?
5. How many SS: LS with electrification:IWM kits did you manufacture last year?
6. What is your production capacity in a year for SS: LS:
7. Would you share with us about your annual income?
8. What is the percentage share of IWM kit manufacturing in your annual income?
9. Which districts is mainly market for you?
10. How do you maintain the relations with SCs and GOAs?
11. Do you have any formal agreement with SCs? If yes, from how many years?
12. Do you manufacture the kits after receiving order or do you keep stock and later you sell to SCs?

Questionnaire for VDC Secretary

Name:

Name of VDC:

Main Areas of Discussion:

1. Do you have any record or data on TWMs denoting the total number of TWMs in your VDC?
2. Have you assisted any TWM to improve or adding end uses in last one year?
3. In your opinion, do you think that if the financial assistance is provided, the TWM owners will be of interest to improve the mill?
4. Is there any demand for IWM installing Electrification or Productive End use? If yes, how much do they expect financially?
5. If you have any suggestion, which is not covered so far.....

Questionnaire for DEES/U officer

Name:

Name of DDC:

Main Areas of Discussion:

1. Does DDC have any record or data regarding TWMs in the district? Or do you have any idea on the TWMs and its concentration in the district?
2. Has anybody made an approach you to improve the mill so far?
3. In last one year, did DDC assist any TWM owner to improve his/her mill?
If yes, was that SS or LS of LS with Electrification?
4. Is there any demand for mill improvement including end use or electrification, if yes, how many are they?
5. Have you any plan to assist TWMs to improve in your district?
6. In your opinion, do you think that if the financial assistance is provided, the TWM owners will be of interest to improve the mill?
7. Is there any demand for IWM installing Electrification or Productive End use? If yes, how much do they expect financially?
8. If you have any suggestion, which is not covered so far.....

Annex 4: Installation of IWM in January 2003 – June 2012

SN	District	2003 - 2010			January - June 2011			July 2011 - June 2012			Grand Total		
		SS	LS	Total	SS	LS	Total	SS	LS	Total	SS	LS	Total
1	Achham			0			0	30		30	30	0	30
2	Baglung	35	2	37			0			0	35	2	37
3	Baitadi	189	5	194	20	0	20	72	4	76	281	9	290
4	Bajhang			0			0	41		41	41	0	41
5	Bajura			0			0	8		8	8	0	8
6	Dadeldhura	175	4	179	8	0	8	40	1	41	223	5	228
7	Dailekh			0			0	73	1	74	73	1	74
8	Darchula			0			0	42		42	42	0	42
9	Dhading	345	98	443	3	3	6	28	5	33	376	106	482
10	Dolakha	346	146	492	11	8	19	27	14	41	384	168	552
11	Dolpa			0			0			0	0	0	0
12	Doti			0			0	56	1	57	56	1	57
13	Gorkha			0			0	12		12	12	0	12
14	Humla			0			0			0	0	0	0
15	Ilam	42	16	58			0			0	42	16	58
16	Jajarkot			0			0	20	1	21	20	1	21
17	Jumla	109	5	114	13	0	13	36	1	37	158	6	164
18	Kalikot	279	5	284	12	1	13	37		37	328	6	334
19	Kavre	668	74	742	7	2	9	34	3	37	709	79	788
20	Lalitpur	282	22	304			0			0	282	22	304
21	Makawanpur	975	47	1022	18	2	20	23	2	25	1016	51	1067
22	Myagdi	16	2	18			0			0	16	2	18
23	Mugu	10	1	11			0			0	10	1	11
24	Nuwakot	819	132	951	15	2	17	56	5	61	890	139	1029
25	Okhaldhunga			0			0	54	5	59	54	5	59
26	Panchthar	0	16	16			0			0	0	16	16
27	Pyuthan	67	8	75			0	4		4	71	8	79
28	Ramechhap	304	87	391	9	4	13	7	3	10	320	94	414
29	Rasuwa	34	1	35	2	0	2	20		20	56	1	57
30	Ropa			0			0	6		6	6	0	6
31	Rukum			0			0			0	0	0	0
32	Salyan			0			0	36	3	39	36	3	39
33	Sindhuli	173	57	230	31	6	37	57	13	70	261	76	337
34	Sindhupalchok	394	34	428	15	2	17	25	2	27	434	38	472
35	Surkhet	259	63	322	10	1	11	54	11	65	323	75	398
36	Tanahun	1	0	1			0			0	1	0	1
37	Taplejung	0	2	2			0			0	0	2	2
Total		5522	827	6349	174	31	205	898	75	973	6594	933	7527

Source: Annual Report July 01, 2011 – June 30, 2012, Improved Water Mill Programme, Centre for Rural Technology, Nepal

Annex 5: Female Ghatta Owners

S.No	S.no	Name of Owner	Address
Dadeldhura			
1	1	Gauma Devi Kunwar	Aalital-4
2	2	Saru Devi Mahara	Bhageshwor-6
3	3	Hasti Devi Limbu	Bagerkot-5
4	4	Dhanmati Devi Thapamagar	Gadkhet-3
5	5	Parbati Devi Tamata	Bhageshwor-4
6	6	Tara Devi Luhar	Navadurga-7
7	7	Bhaga Devi Sharki	Mastamandu-1
8	8	Hira Kumari Ayre	Jogbudha -7
9	9	Raju Devi Mahara	Jogbudha -7
10	10	Ishwori Devi sharkhi	Chipur-6
11	11	Parbati Devi Saund	Gadkhet-7
12	12	Bhavisara Maskey Rana Magar	Aalital-4
13	13	Birma Devi Pulami magar	Aalital-4
14	14	Yamuna Devi Yogi	Khairala-3
15	15	Anita Rawal	Aajaimeru -2
16	16	Durga Bhat	Mohanthal-1
Darchula			
17	1	Jasmati Devi Mahara	Khalanga-9
18	2	Sundari Devi Duwal	Katai-3
19	3	Bhagrathi Joshi	Khalanga-1
Achham			
20	1	Chandra Devi Bohara	Sodshadevi-4
21	2	Nam Devi Luhar	Sodshadevi-5
Bajhang			
22	1	Gita Kumari Bohara	Daulichaur-7
23	2	Janaki Devi Bohara	Rithapata-9
24	3	Sharada Devi Joshi	Khiratadi-8
25	4	Hima Devi Rokhaya	Majhi-3
Doti			
26	1	Kamala Devi Kunwar	Durgamandu-7
27	2	Bindra Khadka	Durgamandu-5
28	3	Chamva Devi Joshi	Durgamandu-3
Baitadi			
29	1	Bagmati Dhami	Gajari-1
30	2	Kalawati Chand	Sikharpur-8
31	3	Tara Devi Bohara	Sikharpur-8
32	4	Bhagirathi Bhatta	Maharudra-4
33	5	Janaki Kapadi	Shreekot-8
34	6	Luxmi Kunwar	Mahadevsthan-8
35	7	Kalma Karki	Dillaseine -8
36	8	Deumati Panta	Siddhapur-2
37	9	Parbati Dhami	Dillaseine -6
38	10	Pashupati Ayer	Shivalinga-7
39	11	Parbati Ayre	Silanga-5
40	12	Pashupati Ayer	Shivalinga-4
41	13	Janaki Ayre	Silanga-4
42	14	Parbati Bhatta	Bashulinga-6
43	15	Janaki Bista	Bhainele-3
44	16	Parbati Ayre	Silanga-5
45	17	Dambara Devi Dhami	Thalakada-4
46	18	Shanti Saund	Maharudra-5
47	19	Sarwati Bhatta	Siddhaswor-2
48	20	Kamala Kumari Bhatta	Siddhapur-6
Pyuthan			
49	1	Jani thapa	Arkha- 3
50	2	Bhima Newpane	Khunga-4

Kalikot			
51	1	Punna Shahi	Malkot-5
52	2	Chandani Rokhaya	Dhaulagahe-3
53	3	Balkauri Shahi	Bharta-2
54	4	Babana Rokhaya	dhaulagahe-1
55	5	Bishna Shahi	Syuna-4
56	6	Dhankala Acharaya	Sukatiya-8
57	7	Kusha Adkhari	Khin-8
58	8	Jamara Shahi	Bharta-3
59	9	Darpana Shahi	Nanikot-9
60	10	Sauri Karki	Dhaulagahe-8
Baglung			
61	1	Birmaya Punmagar	Adkharichaur-9
62	2	Rajkumari Gharti	Bobang-9
63	3	Radhika Bhattari	Bobang-1
64	4	Prema Kumari Gharti	Adkharichaur-5
Salyan			
65	1	Dhansari Basnet	Kajari -6
66	2	Luxmi Rajguru	Syanikhal-3
67	3	Doti Kumari Oli	Syanikhal-1
68	4	Sughi Thapa	Marmapari Kanda-6
69	5	Reshami Kumari Basnet	Kotmaula-3
Jumla			
70	1	Dalli Dangri	Tatopani-5
71	2	Nirmala Giri	Kudari-1
72	3	Punnakali Mahatara	Patmara-7
73	4	Puspakali Rawal	Chhumchaur-3
74	5	Setukala Sharki	Kartikswami-3
75	6	Umakali Rawal	Chhumchaur-2
76	7	Naramkala Yogi	Wadmi-5
77	8	Dipakali Budha	Dillichaur-1
78	9	Parbati Shahi	Kartikswami-6
79	10	Maina Rawat	Chhumchaur-1
80	11	Lalkali Budha	Gothichaur-9
81	12	Kali Bohara	Dillichaur-1
82	13	Hojjakali Budha	Dillichaur-2
83	14	Rajpura Nepali	Talium-4
84	15	Dauma karmi	Raku-3
85	16	Nimbhu Sharki	Depalgaun-3
86	17	Chaukali Sunuwar	Talium-5
Surkhet			
87	1	Dhansara Rawat	Babiyachaur-6
88	2	Manisara Thapa magar	Bidhapur-5
89	3	Bhadrakali Pun	Dharapani-7
90	4	Devisara Gharti	Satakhani-8
91	5	Krishna Gharti	Khanikhola-4
92	6	Manisha Acharaya	Guthu-3
93	7	Yamkali Pun	Dharapani-8
94	8	Kausila Yogi	Satakhani-1
95	9	Durga Devi Bajgai	Tatopani-9
96	10	Nanda Pulami	Babiyachaur-8
97	11	Jaikala Adhikari	Rajana-2
98	12	Jamuni Singh	Neta-4
99	13	Luxmi Rana	Pamka-4
100	14	Gangisara Lamichhane	Kunathari-4
101	15	Lila Ghimire	Bidhapur-2
102	16	Yamsari Gharti	Matela-9
103	17	Bishnu Kumari Bhattari	Kunathari-7
104	18	Nainsara B.K	Mehalkuna-6
105	19	Durga Kandel	Kunathari-4

106	20	Belmati Jaishi	Mehalkuna-5
Dailekh			
107	1	Khageshera Tirowa	Bindhabasene-8
108	2	Hira Kumari Thapa	Lakure -6
109	3	Ram Kumari Thapa	Wadabhairab -5
110	4	Surja Gurung	Banshi -8
111	5	Lalita Rokka Magar	Baluwartar -8
112	6	Devika Bhandari	Banshi -3
113	7	Gaumati Gurung	Banshi-9
114	8	Raj Kumari Shahi	Banshi -8
Illam			
115	1	Prema Kumari Thapa	Sulubung-1
Sindhuli			
116	1	Sukumaya Thing	Netrakali-5
117	2	Bed Kumari Patamagar	Bhadrakali_-2
118	3	Juna Devi Chaulagain	Bhadrakali-8
119	4	Khem Kumari Chaulagain	Jhangajhali Ratamata -5
120	5	Chamale Maya Sangtang	Waritpur -9
121	6	Seti Sharki	Purano Jhangajhali -4
122	7	Muna Moktan	Kalpabrichha -6
123	8	Bil Kumari Dhungel	Jhangajhali Ratamata -7
124	9	Suntali Maya Thapa	Pipalmadi -3
125	10	Seti Maya Waiwa	Hariharpur Gadi -3
Okhaldhunga			
126	1	Kamala Maya Bhujel	Rawadalu -9
127	2	Pasang Doma Sherpa	Khijephalate -6
128	3	Sharkeni Sherpa	Khijephalate -9
129	4	Doma Sherpa	Khijephalate -7
130	5	Yangdi Sherpa	Patle -5
131	6	Doma Sherpa	Patle -4
132	7	Bhawana Sunuwar	Khichandeshwori -1
133	8	Doma Sherpa	Bhusinga -9
134	9	Yangi Sherpa	Jantarkhani -9
135	10	Tej Kumari Rai	Rangadip -5
Nuwakot			
136	1	Ishwori Dangol	Thanapati -7
137	2	Dhan Maya Tamang	Shamari -4
138	3	Bhagwati Adhikari	Thaprek -9
139	4	Ganga Kumari Ghimire	Dangsing-9
140	5	Durga Rimal (Adhikari)	Samari -4
141	6	Sirsani Tamang	Gaukharka -7
142	7	Chiumind Tamang	Kaule -6
143	8	Thulimaya Lama	Kakani -4
144	9	Chandrika Rijal	Tupche -4
145	10	Suntali Maya Gurung	Bumari -5
146	11	Radha Adhikari	Bidur Nagarpalika -9
147	12	Mithu Devi Sapkota	samari -2
148	13	Ram Kumari Lamichhane	Thansing -9
149	14	Dak Kumari Neupane	Belkot -9
150	15	Seti Dangole	Thanapati -7
151	16	Kanchhi Tamang	Bungtang -8
152	17	Sanu Maya Tamang	Kakani -4
153	18	Chheso Tamang	Kaule -5
154	19	Yag Kumari Pandit	Shikharkheti -5
155	20	Bed Maya Ghimire	Gorsyang -4
156	21	Sukumaya Lama	Madanpur -8
157	22	Dil Msaya Dangole	Savari -5
158	23	Hem Kumari Khanal	Dangsing -8
159	24	Sunita Gurung	Bhumari -4
160	25	Parbati Raila	Kumari -4

161	26	Gita Shahi	Balkumari -1
162	27	Maile Tamang	Balkumari -1
163	28	Sani Kanchhi Mijar	Bidur Nagarpalika -9
164	29	Hari Maya Shrestha	Thansing -9
165	30	Thuli Ranamagar	Madanpur -3
166	31	Devaki Thapa	Uriene -4
167	32	Shaili Tamang	Uriene -6
168	33	Fulmaya Tamang	Gerkhu -9
169	34	Bishnu Maya Tamang	Gerkhu -7
170	35	Bhawani Adhikari	Dangsing -6
171	36	Binda Bhandari	Bidur Nagarpalika -9
172	37	Hira Thapamagar	Bidur Nagarpalika -9
173	38	Thuli Maya Tamang	Samundradevi -5
174	39	Kanchhi Tamang	Suryamati -4
175	40	Rajendra Maya Tamang	Malchae -2
176	41	Ramdevi Shrestha	Sikre -3
177	42	Kumarimaya Tamang	Samundradevi -3
178	43	Shanta Lama	Madanpur -9
179	44	Rampyari Mainale	Sundaradevi -4
180	45	Sunita maya Lama	Madanpur -8
181	46	Jharka Kumari Adhikari	Tupche -4
182	47	Chokte Tamang	Samari -9
183	48	Sherfuli Tamang	Ghangfedi -3
184	49	Putali Tamang	Manakamana -7
185	50	Noikaien Tamang	Manakamana -7
186	51	Somjau Tamang	Gaungkharka -7
187	52	Mesh Kumari Devkota	Hallaekalika -4
188	53	Sukumaya Tamangsein	Kimtang -3
189	54	Saili Tamang	Burnale -5
190	55	Pampa Dhungana	Kabilash -6
191	56	Manita Shrestha	Sundradevi -1
192	57	Jira Maya Lama	Chhap -6
193	58	Lachhaya Tamang	Kimtang -1
194	59	Piyojong Tamang	Kimtang -2
195	60	Kaushi Maya Tamang	Dewarali -3
196	61	Sukumaya Tamangsein	Kaulae -9
197	62	Panjom Tamang	Kimtang -3
198	63	Prashmaya Tamang	Kaulae -1
199	64	Parimaya Tamang	Kaulae -1
200	65	Shyam Kumari Tamang	Balkumari -5
201	66	Manga Ghale	Kimtang -2
202	67	Biss Kumari Thapaliya	Madanpur -7
Dolakha			
203	1	Parbati Paudel	Sukhathokar -1
204	2	Ihawori Dahal	Mirge -5
205	3	Mina Bishwokarma	Bhimeshwor Municipality -12
206	4	Ratna Maya Budhathoki	sunkhani -5
207	5	Ram Kumari Thami	Lamidanda -5
208	6	Mithu Maya Magar	Bulung -9
209	7	Kalpana Shrestha	Mirge -7
210	8	Tika Devi Thami	Lapilang -7
211	9	Janaki K.C	Orang -9
212	10	Mithilla Thami	Suspa -4
213	11	Sagun Shrestha	Khor -9
214	12	Kamala Kunwar	Lakuridanda -3
215	13	Harka Maya Thami	Sustha -3
216	14	Aaiti Tamang	Magapauwa -2
217	15	Champa Tamang	Lambagar -8
218	16	Sarswati Basnet	Boajh -3

Kavre			
219	1	Sani Kanchhi Lama Tamang	Rayale -3
220	2	Sahili Tamang	Rayale -7
221	3	Bhagwati Mainale	Sipali -7
222	4	Sukumaya Thokkar	Salmechakel -5
223	5	Sharada Thapa	Mahankalchaur Nagdew -1
224	6	Shaili Tamang	Mechhae -5
225	7	Putali Tamang	Baluwapati Deupur -2
226	8	Sundari Maya Thing	Danda gaun -7
227	9	Dolma Lama Tamang	Katunje -6
228	10	Maile Maya Tamang	Bankhu -7
229	11	Sarswoti Thokker	Falamehtar -9
230	12	Dil Kumari Phakrine	Falamehtar -1
231	13	Kanchhimaya Lopchhan	Falamehtar -9
232	14	Jajmaya Tamang	Shikharambate -8
233	15	Min Kumari Shrestha	Mangaltar -4
234	16	Mani Maya Thokkar	Saldhara -3
235	17	Sukimaya Pakhrine	Wankhu -7
236	18	Tirtha Maya Bal	Salmechakel -3
237	19	Gyane Maya Lama	Falamehtar -6
238	20	Chhalemaya Youngan	Gokule -3
239	21	Pramila Prakhrine	Chaymarangbesi -7
240	22	Sansil Singtan	Chaymarangbesi -2
241	23	Dilmaya Majhi	Danda gaun -9
242	24	Anita Gautam	Katunje -6
243	25	Patalimaya Ghising	Budhakhani -4
244	26	Masale Pahadi	Chaubas -3
245	27	Kanchimaya Jimba	Gokule -3
246	28	Dil Maya Shrestha	Khaharepangue -5
247	29	Bhaktimaya Younjan	Gokule -7
248	30	Buddhi Maya Ruchal	Bhimkhori -6
249	31	Choisal Tamang	Mangaltar -3
250	32	Chanchale Maya Sangtan	Milche 1
251	33	Dev Kumari Mahat	Simthali -2
252	34	Suntali Maya Moktan	Dandagaun -9
253	35	Bhagwati Lungele	Bankhu -5
254	36	Luxmi Gautam	Katunje -6
255	37	Jogmai Tamang	Mechhae -7
256	38	Yousada Chaulagain	Hoksae -4
257	39	Parbati K.C	Panauti Nagarpalika -9
258	40	Sano Bhagwati Khadka	Sallae -8
259	41	Manimaya Golae	Saldhara -3
260	42	Pasang Maya Lama	Mechhae -4
261	43	Sukumaya Thokkar	Saldhara -5
262	44	Harimaya Moktan	Budhakhani -4
263	45	Asalimaya Moktan	Bhimkhori -8
264	46	thulimaya Pakhrine	Bankhu -7
Makwanpur			
265	1	Indra Kumari Ghimire	Aambhanjhang -2
266	2	Fulmaya Rana	Bhimfedi -9
267	3	Harimaya Shikari	Basmadi -8
268	4	Birmaya Lo	Chhatiwani -7
269	5	Kanchhimaya Majhi	Raigaun -5
270	6	Nir Maya Lo	Gadhi -2
271	7	Dil Maya Dong	Aambhanjhang -2
272	8	Buddhi Maya Dong	Aambhanjhang -2
273	9	Sunmaya Bholon	Sisneri -1
274	10	Menuka Bholon	Betani -5
275	11	Bhimmaya Lo	Bhimfedi -3
276	12	Fulmaya praja	Namhar -9

277	13	Durga Kumari Gurung	Chhatiwan -4
278	14	Mandu Maya Golae	Faparbari -6
279	15	Sanumaya Golae	Gadhi -1
280	16	Kanchhi Maya Thing	Shikharpur -6
281	17	Lekh Kumari Chaulagain	Aa . Bha. -6
282	18	Mandira Ghimire	Aa. Bha -1
283	19	Bishnu Kumari Lama Shrestha	Hetauda Nagarpalika -1
284	20	Som Maya Thing	Gadhi -9
285	21	Gyanu Pandey	Handikhola -2
286	22	Kanchhi Maya Ghising	Faparbari -1
287	23	Jiri maya Bujhu	Faparbari -1
288	24	Luxmi Maya Bholone	Raigaun -9
289	25	Jit kumari Thapa	Faparbari -8
290	26	Bimala Maya Thing	Gadhi 1
291	27	Thuli Maya Thing	Gadhi -9
292	28	Panchha maya Moktan	Bharta -7
293	29	Fulmaya Waiwa	Manthali -7
294	30	thulimaya Golane	Faparbari -1
295	31	Suntali Pakhrine	Aambhanjhang -4
296	32	Batu Maya Bholone	Manthali -4
297	33	Luxmi Paudel	Gadhi -7
298	34	Sun Jyoti Bholone	Manthali -4
299	35	Maile Maya Dong	Basamadi -1
300	36	Bimala B.K	Namtar -4
301	37	Samina Ghising Bholone	Sisneri -9
302	38	Suntali Maya Rumba	Gadhi -8
303	39	Yadav Kumari Ghimire	Gadhi -7
304	40	Saili Maya Moktan	Manthali -9
Sindhupalchok			
305	1	Dol Kumari Magar	Pipaldanda -6
306	2	Mithhae Khadka	E-chock -7
307	3	Putali Tamang	Bhotang -6
308	4	Chhayang Kuti Sherpa	Tatopani -4
309	5	Gelmu Sherpa	Helambu -6
310	6	Manmai Tamang	Manesware -4
311	7	Lulumai Lama	Syaule -1
312	8	Parbati Shivabhakti	Bhotenamiang -7
313	9	Bimala Sherpa	Tatopani -5
314	10	Pramila Thapa	Dhumpakhar -8
315	11	Sukumaya Thami	Ghumthang -7
316	12	Norgi Tamang	Ghumthang -7
Ramechhap			
317	1	Chandra Thapa Magar	Doramba -8
318	2	Manmaya Shrestha	Makdhum -1
319	3	Samele Tamang	Laakhanpur -7
320	4	Lilamaya Thapa Magar	Khodadevi -6
321	5	Ganaga Khatiwada Paudel	Duragaun -7
322	6	Diblemaya Newar	Gupneshwor -4
323	7	Mishra Khadka	Hiledevi -9
324	8	Khusmaya Tamang	Preeti -2
325	9	Bishnu Maya Thapamagar	Laakhanpur -6
326	10	Sange Thami	Khadadevi -6
327	11	Suvaluxmi Shrestha	Gunsi -9
328	12	Nirmaya Thokkar	Gagal -4
329	13	Rita Kandel	Doramba -6
Dhading			
330	1	Sita Nepal	Dhuwakot -8
331	2	Sonam Kumari Tamang	Samjong -5
332	3	Ram Maya Tamang	Jhalang -7
333	4	Sharada Rawal	Mahadevsthan -5

334	5	Dew Maya Ghale	Baseri -3
335	6	Dhan Maya Praja	Jogimara -1
336	7	Luxmi Tamang	Mahadevsthan -2
337	8	Kamala Adhikari	Khari -1
338	9	Aaiti Tamang	Lapa -5
339	10	Jamunawati Tamaning	Darkha -3
340	11	Alina Tamang	Sertung -5
341	12	Shree Kumari Tamang	Samjong -5
Lalitpur			
342	1	Bishnu Maya Younjan	Bukhel -2
343	2	Aati Maya Thokkar	Chandanpur -1
344	3	Man Kumari Bholone	Sankhu -8
345	4	Krishna Kumari Nagarkoti	Dalchauki -7
346	5	Mangala Maya Nagarkoti	Lale -7
347	6	Kanchi Maya Marba	Lale -8
348	7	Kanchhi Maya Ghalan	Malta -9
349	8	Kanchi Maya Sangtang	Thula Durlung -1
350	9	Sanu Maya lo	Bukhel -6
351	10	Sarita Sapkota	Chaudhare -4
352	11	Kumari Maya Golae	Chandanpur -4

Source: IWMP

Annex 6: Details of Enduses of IWM

S. no	District	Rice hulling, husking & polishing	Oil Expelling	Saw milling	Chiura Beater	Masalaa Grinding	Electrification	Lokta Beater	other
1	Baitadi	7		3			1		2 theki cutter
2	Dadeldhura	4	1						
3	Dhading	95	4	11			1		1 theki cutter & 1 juice extractor
4	Dolakha	162	2	13	1		4	1	
5	Jumla	6	1						
6	Kalikot	3					5		
7	Mugu	1							
8	Nuwakot	120	2	14	2	2	4		1 choya seperator
9	Panchthar	16							
10	Pyuthan	7	1						
11	Rasuwa	1							
12	Sindhuli	75	4	2	1				
13	Surkhet	70	14						
14	Kavre	60	2	3			6		
15	Ramechhap	89	1	2			1	1	
16	Jajarkot	1							
17	Salyan	2	1						
18	Dailekh	1							
19	Sindhupalchok	33		4			2	1	
20	Makawanpur	48		3		3	4		
21	lalitpur	3	1	12			9		
22	Doti	1							
23	Okhaldhunga	5							
24	Ilam	15							one tea squizzer
	Total	825	34	67	4	5	37	3	981

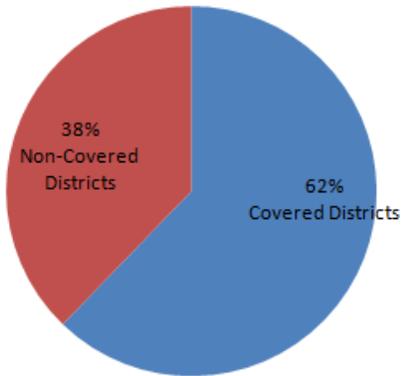
Annex 7: Electrification Status

S.N.	Address	Project Name	Capacity (kW)	Beneficiary (HHs)	Subsidy status	Remarks
1	Simpal Kavre-2, Sindhupalchowk	Baseri IWME Project	2.5	20	In process	Operation
2	Kunchowk-3, Sindhupalchowk	Sikari Khola IWME Project	3	40	No	No operation
3	Samudradevi-7, Nuwakot	Samundradevi IWME Project	2	34	No	Operation
4	Phalametar-7, kavre	Khanikhola Gramin laghu Jalbidhyut aayojana	2.5	32	150,000	Operation
5	Salmechakal-9, Kavre	Hattisar Laghu Jalbidhyut Aayojana	5	51	300,000	Operation
6	Saldhara-5, Kavre	Sana IWME Project	3.5	48	In process	Operation
7	Saldhara-3, Kavre	Banspur khola IWME Project	2.5	20	In process	Operation
8	Phalametar-8, kavre	Narayan khola IWME Project	2	20	In process	Operation
9	Mechchhe-5, Kavre	Roshi Khola IWME Project	2.5	36	150,000	Operation
10	kalikatar-1, Makawanpur	Kalikhola Ghatta Bidhyutikaran aayojana	4	50	240,000	Operation
11	Betini-5, Makawanpur	Tintor IWME Project	3	10	In process	Operation
12	Kankada-1, Makawanpur	Sidam Khola IWME Project	2	33	No	Operation
13	Basamadi-7, Makawanpur	No name	1.5	17	No	Operation
14	Katujpani-3, Baitadi	Ghatte Khola IWME Project	2.2	30	In process	Operation
15	Bulung-5, Dolakha	Sorong Khola IWME Project	1.5	35	In process	Operation
16	Marbu-8, Dolakha	Tokdhing IWME Project	1.5	28	In process	Operation
17	Babare-1, Dolakha	No name	3	51	No	Operation
18	Khopachangu-3, Dolakha	Sange padhera IWME Project	3	42	In process	Operation
19	Chilkhaya-3, kalikot	Janakalyan Community IWME Project	3.3	38	No	Operation
20	Chilkhaya-9, kalikot	Laganshil tatha Triveni Community IWME Project	3	37	No	Operation
21	malkot-6, Kalikot	Adheri Khola IWME Project	3.1	81	No	Operation
22	Nanikot-1, kalikot	Bolugaun IWME Project	3	48	No	Operation
23	kalika-8, Kalikot	Kalika IWME Project	3	70	No	Operation
		Total	62.6	871		

Annex 8: Geographical Coverage

S.N.	Development Regions	Programme Districts	Remarks
1	Eastern Development Region	<ul style="list-style-type: none"> • Illam • Panchthar • Okhaldunga 	
2	Central Development Region	<ul style="list-style-type: none"> • Dolkha • Ramechhap • Sindhuli • Kavre • Sindhupalchok • Lalitpur • Dhading • Nuwakot • Rasuwa • Makwanpur 	
3	Western Development Region	<ul style="list-style-type: none"> • Gorkha 	
4	Mid-Western Development Region	<ul style="list-style-type: none"> • Pyuthan • Rolpa • Rukum • Salyan • Jajarkot • Surkhet • Dailekh • Kalikot • Jumla • Mugu • Dolpa • Humla 	
5	Far-Western Development Region	<ul style="list-style-type: none"> • Achham • Doti • Bajhang • Bajura • Darchula • Baitadi • Dadeldhura 	

The %age of coverage and non coverage districts by IWMP is also shown below in the chart below:



IWM	Covered Districts	Non-Covered Districts	Total
No. Of Districts	33	20	53

Fig. Districts Coverage Chart by IWMP

Annex 9: Baseline Survey of IWM Sindhuli District in Long Shaft-Electrification Focused: August 2012

S. No	IWM Owners Name (Caste)	Addresses	IWM operator (Owner/other)		%age of Family depending on IWM	Head (m)	Water flow (lps)	Output Power (Kw)	Enduse type	Electrification Coverage clients		Operation time (in term of days per year)	Income (Rs. Per month)	Grid line		Existing Power source	Feasibility for electrification	Possibility of other enduses	Aces sibili ty to Road (KM)	Wa lki ng hr
			Men (Caste)	Women (Caste)						Men	Women			Yes	No					
1	Bil kumari dhungel	jhangaj huli ratamata		Female	60	8	40	1.6	Huling+ grinding +furniture	N	N	120	15000		N	Solar power	yes	electification	60	1
2	Indra bha.magar	tinkanya	Male		70	6	65	1.95	Huling+ grinding	N	N	210	20000		N	Solar power	yes	N	90	4
3	Purna bha.thing	Netra kali	Male		65	15	50	3.75	Huling+ grinding	N	N	180	20000		N	Solar power	yes	Furniture+	50	2
4	Tritha bha.thapa	Bala jor	Male		75	14	44	2.8	Huling+ grinding	yes	yes	180	17000		N	Peltric set	yes	Furniture+Oil expeler	90	1.5
5	Ram bha. Ale	Ranich uri	Male		80	7	55	1.92	Huling+ grinding	N	N	150	15000		N	Solar power	yes	Furniture+Oil expeler	80	1.5
6	bhudi bha. Ale	Ranich uri	Male		40	7	70	2.45	Huling+ grinding	N	N	210	24000		N	Solar power	yes	CHURAMILL+ Oil expeler	80	2.5
7	Krishna bha. Thapa	Balajor	Male		60	7	65	2.27	Huling+ grinding		N	150	17000		N	Solar power	yes	Oil expeler	80	1
8	Mohon basnet	Balajor	Male		63	6	65	1.97	Huling+ grinding	N	N	150	17000		N	Solar power	yes		80	0.5
9	Damar bha. Khatri	Bastipur	Male		62	7	55	1.92	Huling+ grinding	yes	yes	150	15000				NO	Oil expeler	30	5
10	Parvu ram khatri	kholagau	Male		72	6	60	1.8	Huling+ grinding +oil ex	N	N	210	24000		N	Solar power	No	chiura kutani	90	3.5
11	Sarmila gautam	Bhadra kali		Female	75	6	65	1.95	Huling+ grinding	yes	yes	150	17000	Yes			NO	furniture	60	0.3

12	Setimaya waiba	Harihar pur Gadi		Female	81	15	35	2.62	Huling+ grinding	n o	no	120	15000		N	Solar power	yes	no	70	0.1
13	Sarkiman yonjan	jhangaj huli ratama ta		Female	75	12	52	3.12	Huling+ grinding	n o	no	150	20000		n	Solar power	yes	furniture	60	1

Annex 10: Baseline Survey of IWM Sindhuli District in Short Shaft: August 2012

S. No	IWM Owners Name (Caste)	Address	IWM operator (Owner/other)		Water flow (lps)	Out put Power (Kw)	Operation time (in term of days per year)	Income (Rs. Per month)	%age of Family depending on IWM	Grid line		Exitng Power source	Feaibility for electrification	Possibility of other end uses	Accessability to Road (KM)	walkin g hr
			Men	Women						Yes	No					
1	Prem parsad gautam	bauntilpung	Male		50	1.75	150	12000	50		No	Solar Power	N	N	70	1
2	Pha bha. Genel	Kapilakot	Male		25	0.75	160	15000	70	Yes			N	N	60	1
3	Dil bha. ale	Belghari	Male		50	0.75	140	9000	40	Yes			N	N	60	3
4	Yek bha. Durunchang	Pipalmadi	Male		55	0.825	140	11000	45		No		N	N	80	4
5	Birpati Bholan	Bhimthan	Male		55	1.95	210	13000	55	Yes			Y	Furniture	80	4
6	Aamar bha. Khatri	Arunthakur	Male		45	0.9	220	10000	40		No	Solar Power	N	N	60	6
7	Tritha bha. Sangthan	Bastipur	Male		60	0.18	180	8000	40		No	Solar Power	N	N	45	5
8	Bindra man pakhrin	Pipalmadi	Male		72	0.72	205	12000	45		No	Solar Power	N	N	70	0.15
9	Chandra man pakhrin	Pipalmadi	Male		75	0.75	200	14000	60		No	Solar Power	N	N	70	0.15
10	Indra bha.thing	Mahendra jhadi	Male		50	0.75	200	16000	70		No	Solar Power	N	N	80	0.15
11	Dan bha. Thapa mager	Tinkanya	Male		25	0.62	170	10000	45		No	Solar Power	N	N	60	2
12	Dan bha lungeli	Bastipur	Male		45	1.8	220	9000	45		No	Solar Power	Y	Y	45	5
13	Krishna bha. Mager	Tinkanya	Male		40	0.7	170	8000	40		No	Solar Power	N	N	60	2
14	Muna moktan	Kalpabrichay	Male	Female	15	0.6	190	13000	55	Yes			N	N	60	2

15	Mangal bha. Sarki	Pipalmadi	Male		45	0.75	200	14000	60		No	Solar Power	N	N	100	0.1
16	Nara bha. Karki	Lampantar	Male		50	1	150	12000	45		No	Solar Power	y	N	70	0.5
17	Suntali maya thapa	Pipalmadi	Male	Female	75	0.75	180	13000	55		No	Solar Power	N	N	45	0.2
18	Chandra man pakhrin	Harihar gadi	Male		60	0.9	170	7000	35		No	Solar Power	N	N	80	3
19	Kaji man deu	Harihar gadi	Male		80	0.8	180	8000	40		No	Solar Power	N	N	80	2
20	Arjun moktan	Mahendra jhadi	Male		70	0.7	170	10000	45		No	Solar Power	N	N	80	0.3
21	Gaan bha. Tamang	Pipalmadi	Male		85	0.85	180	14000	60		No	Solar Power	N	N	80	0.45
22	Ser bha. Lama	Pipalmadi	Male		60	0.6	200	9000	45		No	Solar Power	N	N	80	0.55
23	Bir man jimba	kayneshower	Male		14	0.49	180	10000	45		No	Solar Power	N	N	50	0.5
24	Mohon bha. Khatri	Lampantar	Male		55	0.89 4	150	9000	45		No	Solar Power	N	N	80	0.3
25	jhanak bha. Malla	solpathana	Male		40	0.16	140	8000	40		No	Solar Power	N	N	90	5
26	Dhana bha. Moktan	Belghari	Male		60	0.9	130	6000	35	Yes			N	N	45	2
27	Bhim bha. Karki	kakurthakur	Male		60	0.9	160	8000	40		No	Solar Power	N	N	70	6
28	Indra bha. Yaiba	Pipalmadi	Male		65	0.65	190	13000	50		No	Solar Power	N	N	90	3
29	chandra bha. Khulala	Tinkanya	Male		40	0.8	140	7000	35		No	Solar Power	N	N	60	0.3
30	Aadil man rai	Ratnawati	Male		55	0.82 5	150	9000	40		No	Solar Power	N	N	70	2
31	Chitra bha. Yonjan	Hariharpur gadi	Male		35	0.52 5	150	8000	40		No	Solar Power	N	N	70	4
32	Jit bha. Ale	Ranichuri	Male		20	0.7	140	7000	30	Yes			N	N	50	3
33	Chatra bhadur Thapa	Balajor	Male		40	1	130	6000	30		No	Solar Power	y	Y	40	3
34	purna bhadur moktan	caneshower	Male		50	1.5	170	12000	50		No	Solar Power	y	y	80	4

35	Dedlal shrestha	Ranichuri	Male		70	0.85	130	6000	30		No	Solar Power	no	no	30	8
37	Indra bhadur manger	Tinkanya	Male		30	0.6	150	15000	60		no	Solar Power	no	no	50	3
38	Nabaraj acharye	Arunthakur	Male		35	1.47	160	9000	40		no	Solar Power	y	y	50	3
39	nup bhadur karki	Arunthakur	Male		60	1.2	140	11000	50		no	Solar Power	y	y	50	3
40	tokal bhadur waiba	Bastipur	Male		25	1	140	13000	50		no	Solar Power	no	no	30	7
41	yem bhadur ale	Ranichuri	Male		55	0.85	210	10000	45		no	Solar Power	no	no	30	0.3
42	Dolat moktang	mahadevstan	Male		35	2.1	220	8000	40		no	Solar Power	y	y	60	1.3
43	Rudra sunwar	Arunthakur	Male		25	1	180	12000	50		no	Solar Power	y	y	50	3
44	panchawati samudaik sastha	Tinkanya	Male		45	1.12 4	205	14000	55		no	Solar Power	y	y	60	3
45	Dil bhadur rana mager	Tinkanya	Male		50	0.75	200	16000	60		no	Solar Power	no	no	60	2.3
47	Tanka bhadur ale manger	Bhimthan	Male		45	0.9	200	10000	50	yes					30	3
48	Dur bhadru rana mangare	Tinkanya	Male		55	0.82 5	170	9000	45		no	Solar Power	no	no	60	2
49	Birjiman banjan	Amale	Male		35	1.25	220	8000	40		no	Solar Power	yes	yes	17	2
50	Dan bhadur lungei	Bastipur	Male		45	3.25	170	13000	55		no	Solar Power	yes	yes	17	6
51	Dan bhadur thapamange	Tinkanya	Male		25	0.62 5	190	15000	60		no	Solar Power	no	no	30	1.3
52	Indra bhadru thing	Mahendra jhadi	Male		50	750	200	9000	40		no	Solar Power	no	no	50	2
53	Dhana bha. Karki	Ratnawati	Male		50	0.75	150	11000	50		no	Solar Power	no	no	80	1
54	kesar bhadur karki	Ratnawati	Male		50	1.5	180	13000	50		no	Solar Power	yes	yes	80	1
55	Hari bhadru gole	Harihar gadi	Male		24	1.2	170	10000	45		no	Solar Power	no	no	60	4

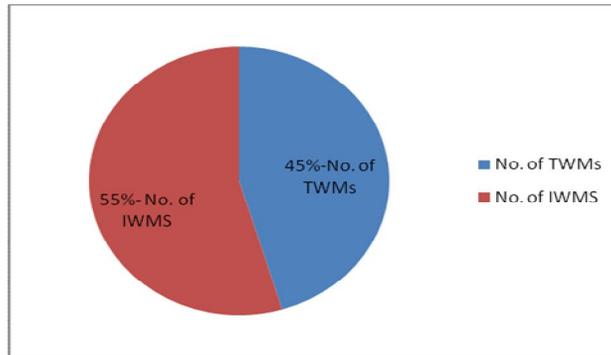
56	chandra bha khulal	Tinkanya	Male		40	0.8	180	8000	40		no	Solar Power	no	no	35	3
57	padam bha. Thapa	udyepur,sorong padam bha. Thapa	Male		50	0.75	170	12000	50		n	Solar Power	no	no	90	1

Annex 11: Analysis of Sindhuli District

The above information is illustrated in the table and chart below for analysis.

Total No. of TWMs and IWMS

	No. of TWMs	No. of IWMS	Total
No.	275	337	612
in %	45%	55%	100%



IWM operator

Sex	Men	Women	Total
No. of IWM	62	6	68
%	91%	9%	100%

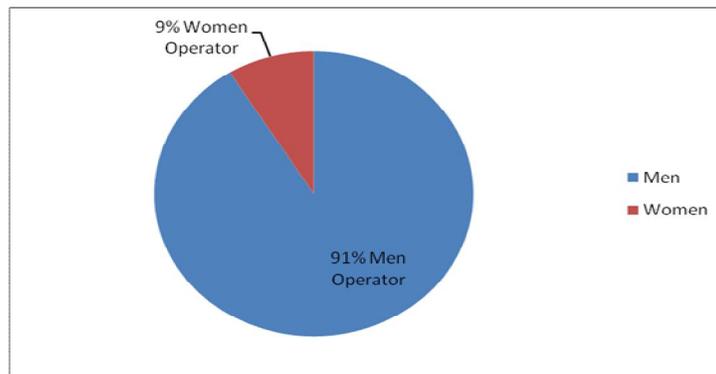


Fig. IWM operator chart

Income generation and % Dependency of family on IWM of Sindhuli District

S. No	IWM Owners Name (Caste)	Address	Income (Rs. Per month)	%age of Family depending on IWM
1	Bil kumari Dhungel	Jhangajhuli ratamata	15000	60
2	Indra bha.Magar	Tinkanya	20000	70
3	Purna bha.thing	Netra kali	20000	65
4	Tritha bha.thapa	Bala jor	17000	75
5	Ram bha. Ale	Ranichuri	15000	80
6	Bhudi bha. Ale	Ranichuri	24000	40
7	Krishna bha. Thapa	Balajor	17000	60
8	Mohon basnet	Balajor	17000	65
9	Damar bha. Khatri	Bastipur	15000	60
10	Parvu ram khatri	kholagau	24000	70
11	Sarmila gautam	Bhadrakali	17000	75
12	Setimaya waiba	Hariharpur Gadi	15000	80
13	Sarkiman yonjan	jhangajhuli ratamata	20000	75
14	Prem parsad gautam	bauntilpung	12000	50
15	Pha bha. Genel	Kapilakot	15000	70
16	Dil bha. ale	Belghari	9000	40
17	Yek bha. Durunchang	Pipalmadi	11000	45
18	Birpati Bholan	Bhimthan	13000	55
19	Aamar bha. Khatri	Arunthakur	10000	40
20	Tritha bha. Sangthan	Bastipur	8000	40
21	Bindra man pakhrin	Pipalmadi	12000	45
22	Chandra man pakhrin	Pipalmadi	14000	60
23	Indra bha.thing	Mahendra jhadi	16000	70
24	Dan bha. Thapa mager	Tinkanya	10000	45
25	Dan bha lungeli	Bastipur	9000	45
26	Krishna bha. Mager	Tinkanya	8000	40
27	Muna moktan	Kalpabrichay	13000	55
28	Mangal bha. Sarki	Pipalmadi	14000	60
29	Nara bha. Karki	Lampantar	12000	45
30	Suntali maya thapa	Pipalmadi	13000	55
31	Chandra man pakhrin	Harihar gadi	7000	35
32	Kaji man deu	Harihar gadi	8000	40
33	Arjun moktan	Mahendra jhadi	10000	45
34	Gaan bha. Tamang	Pipalmadi	14000	60
35	Ser bha. Lama	Pipalmadi	9000	45

36	Bir man jimba	kayneshower	10000	45
37	Mohon bha. Khatri	Lampantar	9000	45
38	jhanak bha. Malla	solpathana	8000	40
39	Dhana bha. Moktan	Belghari	6000	35
40	Bhim bha. Karki	kakurthakur	8000	40
41	Indra bha. Yaiba	Pipalmadi	13000	50
42	chandra bha. Khulala	Tinkanya	7000	35
43	Aadil man rai	Ratnawati	9000	40
44	Chitra bha. Yonjan	Hariharpur gadi	8000	40
45	Jit bha. Ale	Ranichuri	7000	30
46	Chatra bhadur Thapa	Balajor	6000	30
47	purna bhadur moktan	caneshower	12000	50
48	Dedlal shrestha	Ranichuri	6000	30
49	Indra bhadur manger	Tinkanya	15000	60
50	Nabaraj acharye	Arunthakur	9000	40
51	nup bhadur karki	Arunthakur	11000	50
52	tokal bhadur waiba	Bastipur	13000	50
53	yem bhadur ale	Ranichuri	10000	45
54	Dolat moktang	mahadevstan	8000	40
55	Rudra sunwar	Arunthakur	12000	50
56	panchawati samudaik sastha	Tinkanya	14000	55
57	Dil bhadur rana mager	Tinkanya	16000	60
58	Tanka bhadur ale manger	Bhimthan	10000	50
59	Dur bhadru rana mangare	Tinkanya	9000	45
60	Birjiman banjan	Amale	8000	40
61	Dan bhadur lungai	Bastipur	13000	55
62	Dan bhadur thapamange	Tinkanya	15000	60
63	Indra bhadru thing	Mahendra jhadi	9000	40
64	Dhana bha. Karki	Ratnawati	11000	50
65	kesar bhadur karki	Ratnawati	13000	50
66	Hari bhadru gole	Harihar gadi	10000	45
67	chandra bha khulal	Tinkanya	8000	40
68	padam bha. Thapa	udyepur	12000	50
	Average		12029.41	50.66

The information can also be shown in the table and chart as below

	Below 50%	(50-60)%	(60-70)%	(70-80)%	(80-90)%	Total
In Nos.	33	15	11	7	2	68
	Below 50%	Below 60%	(60-70)%	(70-80)%	(80-90)%	Total
In %	49%	22%	16%	10%	3%	100%

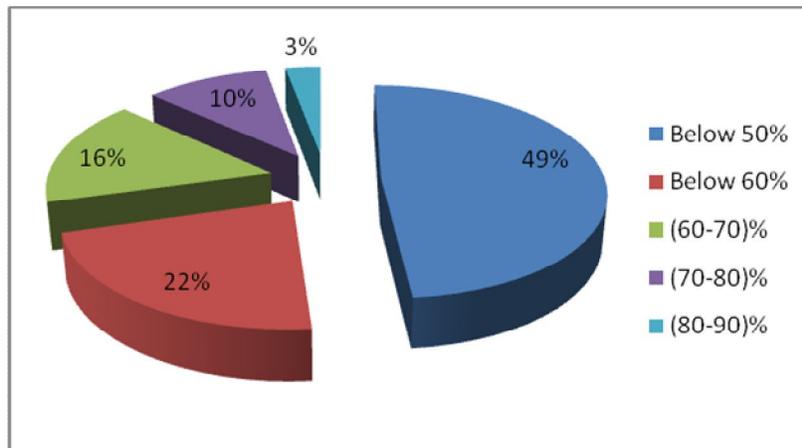


Fig. Chart Showing % dependency of Family on IWMin Sindhuli

The information is shown in the chart below:

	Below 10,000	10,000-15,000	15,000-20,000	Above 20,000	Total
In Nos.	23	27	13	5	68
	Below 10,000	10,000-15,000	15,000-20,000	Above 20,000	Total
In %	34%	40%	19%	7%	100%

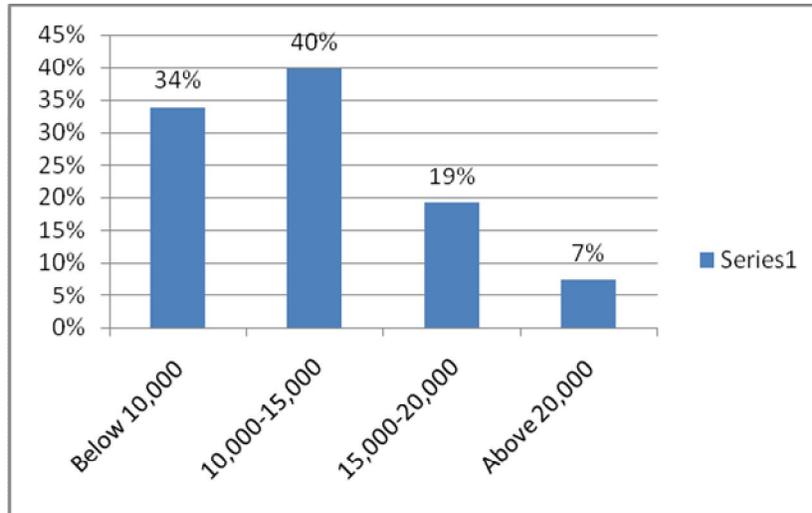


Fig. Income per month of IWM owners of sindhuli

Feasibility for Electrification

S. N.	IWM Owners Name (Caste)	Output Power kW (Feasibility for IWM/E from Existing LS)	S. N.	IWM Owners Name (Caste)	Output Power kW (Feasibility for IWM/E from Existing SS)
1	Bil kumari Dhungel	1.6	1	Birpati Bholan	1.95
2	Indra Bha.Magar	1.95	2	Dan Bha Lungeli	1.8
3	Purna Bha.Thing	3.75	3	Prem parsad gautam	1.75
4	Tritha bha.Thapa	2.8	4	Nara bha. Karki	1
5	Ram bha. Ale	1.92	5	Chatra Bdr Thapa	1
6	Bhudi bha. Ale	2.45	6	Purna Bdr Muktan	1.5
7	Krishna bha. Thapa	2.27	7	Nabaraj Acharye	1.47
8	Mohon Basnet	1.97	8	Nup Bdr karki	1.2
9	Damar bha. Khatri	1.92	9	Dolat maktang	2.1
10	Parvu ram Khatri	1.8	10	Rudra sunwar	1

11	Sarmila Gautam	1.95	11	panchawati samudaik sastha	1.124
12	Setimaya Waiba	2.62	12	Birjiman banjan	1.25
13	Sarkiman Yonjan	3.12	13	Dan bhadur lungei	3.25
			14	kesar bhadur karki	1.5
			15	Hari bhadru gole	1.2

Operation Time

S.N	Operation time(in term of days per year)	Months
1	120	4
2	210	7
3	180	6
4	180	6
5	150	5
6	210	7
7	150	5
8	150	5
9	150	5
10	210	7
11	150	5
12	120	4
13	150	5
14	150	5
15	160	5.33
16	140	4.67
17	140	4.67
18	210	7
19	220	7.33
20	180	6
21	205	6.83
22	200	6.67
23	200	6.67
24	170	5.67

25	220	7.33
26	170	5.67
27	190	6.33
28	200	6.67
29	150	5
30	180	6
31	170	5.67
32	180	6
33	170	5.67
34	180	6
35	200	6.67
36	180	6
37	150	5
38	140	4.67
39	130	4.33
40	160	5.33
41	190	6.33
42	140	4.67
43	150	5
44	150	5
45	140	4.67
46	130	4.33
47	170	5.67
48	130	4.33
49	150	5
50	160	5.33
51	140	4.67
52	140	4.67
53	210	7
54	220	7.33
55	180	6
56	205	6.83
57	200	6.67
58	200	6.67
59	170	5.67
60	220	7.33
61	170	5.67
62	190	6.33
63	200	6.67

64	150	5
65	180	6
66	170	5.67
67	180	6
68	170	5.67
Average	171.76	5.73

The information is illustrated below:

	4-5 months	5-6 months	6-7 months	7-8 months	Total
No of IWM	12	25	21	10	68

	4-5 months	5-6 months	6-7 months	7-8 months	
in %	18%	37%	31%	15%	100%

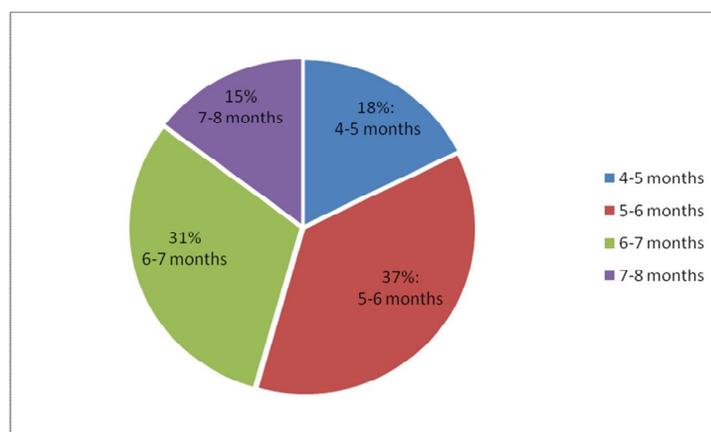


Fig. Operating Time of ghattas per year in Sindhuli

Grid Access

Grid line	Yes	No	Total
No. of IWMs	8	60	68

	Yes	No	Total
%	12%	88%	100%

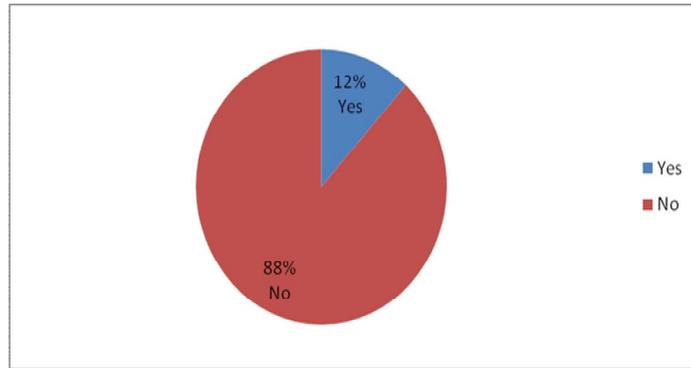


Fig. % of Grid Access at IWM sites in Sindhuli

Accessibility to Road

S.N	Accessibility to Road (KM)
1	70
2	60
3	60
4	80
5	80
6	60
7	45
8	70
9	70
10	80
11	60
12	45
13	60
14	60
15	100
16	70
17	45
18	80
19	80
20	80
21	80
22	80
23	50
24	80
25	90

26	45
27	70
28	90
29	60
30	70
31	70
32	50
33	40
34	80
35	30
36	50
37	50
38	50
39	30
40	30
41	60
42	50
43	60
44	60
45	30
46	60
47	17
48	17
49	30
50	50
51	80
52	80
53	60
54	35
55	90
56	60
57	90
58	50
59	90
60	80
61	80
62	80
63	80
64	30

65	90
66	60
67	70
68	60
Average	62.48

The information is shown in the table and chart below

Below 30 KM	(30-50) KM	(50-70) KM	Above 70 KM	Total
2	12	23	31	68

Below 30 KM	(30-50) KM	(50-70) KM	Above 70 KM	Total
3%	18%	34%	46%	100%

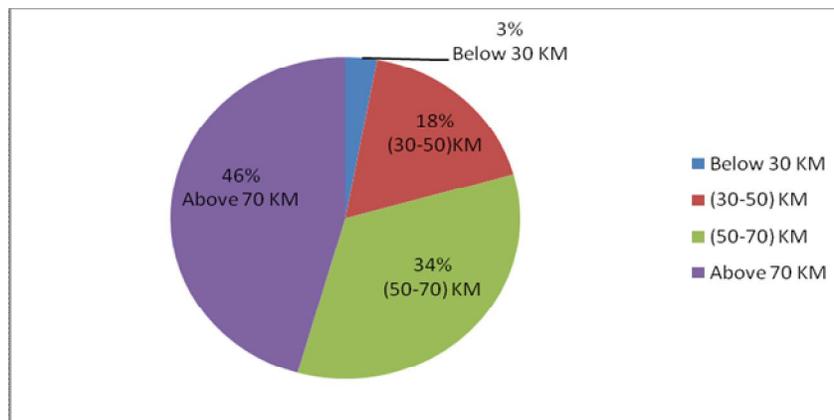


Fig. Accessibility to Road to IWM sites in Sindhuli

Annex 12: Baseline survey of Dhading District

S. No	IWM Owners Name	Address	IWM operator (Owner/other)		%age of Family dependin g on IWM	Head (m)	Water flow (lps)	Output Power (Kw)	Operation time(in term of Hrs per days)	Operation time(in term of days per month)	Income (Rs. Per month)	Enduse type	Grid line		Exiting Power source	Feability for electrifica tion	Possibilit y of other enduses
			Men	Women									Yes	No			
1	Mangal B.Parja	Pida 4 Changli,Gaudikhola	Male		70	5	52	1.3	9	24	4800	huller		No		Yes	Saw mill
2	Padam B Tamang	Pida 8 khorkhe,Halkhola	Male		60	9	32	1.5	8	28	4250	huller		no			chiura mill
3	Khutram Adhikari	Kalleri 5 kallerigaun,Kosikhola	Male		65	13	42	2.8	9	30	5660	huller		no			
4	Hast B Bhandri	Mulpani 3 Bhandrigaun	Male		60	6	42	1.3	9	30	4850	huller	Yes		Peltric set		
5	May lama	Ri 9 Kichet,Khelingkhola	Male		70	36	22	3.9	10	30	3060	Oil expeler	yes		Peltric set	Yes	saw mill
6	Tulasi b Baniya	Fulkhark 1 Bhadaure,Thulokhola	Male		60	47	8.2	1.9	10	25	5050	huller		no			
7	Chandra b Parja	Pida 8 Changli,vumankhola	Male		60	4	27	0.5	11	26	5560	huller		no			
8	Tesalam Tamang	Sertung 9 Hinrung,selsongkhola	Male		55	18	27	2.5	12	25	4050	sawmill		no	Solar		holller

9	sher b Tamng	Mahadevsthan 2 Chiuredar, Taltikhola	Male		70	3	50	0.7	10	28	3870	huller		no			saw mill
10	Tulasiram Adhikari	Fulkhark 3 latis, Chise khola	Male		75	10	28	1.4	9	30	5590	huller	Yes		Peltric set		
11	Oon b Tamang	Baireni 5 Koilikhark, chauradi khola	Male		70	10.3	36	1.9	9	28	5000	huller		no			
12	Hemant Adhikari	Baireni 2sihana, charaudi khola	Male		75	6.5	65	2.25	8	26	4900	huller		no			
13	Bhakta B chepang	Pida 4 basbari, khaharekhola	Male		70	6	70	2.1	9	28	6000	huller		no			
14	Bhim b Magar	Jogimara 5 hundikhola	Male		70	8	32	1.2	9	28	2100	grinding		no		Yes	holler
15	Sharan Tamang	Kiranchowk 8 jositar, belkhukhola	Male		70	4.5	75	1.6	9	30	5175	huller		no	Solar		saw mill
16	chhadalama Tamang	sertung 3 abue, samsyongkhola	Male		40	14	30	2.1	8	30	4450	sawmill		no			
17	Bharat subedi	Pida 8 dariyal, dariyalkhola	Male		50	8	48	1.8	8	30	5175	huller		no			
18	Sachin Gurung	Marpak 7 kintang, kintangkhola	Male		50	9	48	2.16	12	30	5175	huller	Yes		Peltric set		
19	keyersing rai	Baseri 7 Raigaun	Male		40	21	34	3.5	12	26		huller		no			
20	Jit b. Gurung	Lapa 3 kharing,	Male		40	29	26	3.7	12	26	2600	Oil expeler		no			

21	Bhim b.Magar	Jogimara 5 bachreng,bhachreng khola	Male		75	6	52	1.5	10	28	3540	huller		no		Yes	
22	Dhul B.Ranamager	Jogimara 5 jogimara,Gangali khola	Male		70	14	42	2.94	12	28	3540	huller	yes		National Grid		
23	PURNA b.Magar	Jogimara 5 Manrang,Mautikhola	Male		75	10	35	1.6	10	28	3540	huller		no			
24	Rmasaran paudyal	Gumdi 8falnge,sisnekhola	Male		70	10.5	46	2.5	11	28	3540	huller			Peltric set		saw mill
25	Bir B.Lopchan	Kiranchwok 4 Puranogaun,parbati khola	Male		60	5	37	0.9	11	28	3540	huller		no			
26	Hark b Gurung	Semjong 9 keura,Lapang khola	Male		60	5	37	0.9	12	28	3540	huller		no			chiura mill
27	Partap Tamang	Baireni 3 wodare,Belkhola	Male		60	50	3.5	0.85	12	28	3540	huller		no			
28	Baburam tamang	Pida 8 Baluwadanda,dariyalkhola	Male		55	24.5	25	3	10	28	2250	Electricity					
29	Dil b Tamang	Pida 7 tarbot,Ghatte khola	Male		60	12	85	5	10	28	3540	huller		no			
30	Bikash Tamang	Lapa 1 kapurgaun,gyonrong khola	Male		55	11	17	0.9	11	28	2850	grinding		no			
31	Limbu Tamang	Ri 5 richet,kheling khola	Male		70	24.5	36	4.4	11	28	3190	Oil expeler	yes		Peltric set		holller

32	Hark b tamang	Gajuri 9 Walsing,walsing khola	Male		70	8.5	68	2.8	11	28	3590	huller		no		Yes	
33	Kalyan Tamang	Khari 1dhap,Pachuwa khola	Male		65	11	49	2.6	10	28	1400	grinding		no			holler
34	Gewapesang Tamang	Jharlang 3 Tarchi,dyangsyong khola	Male		65	30	5	0.75	11	28	3590	huller		no			
35	Sing b Tamang	Lapa 2 Thulogaun	Male		60	40	12	2.4	9	28	5750	sawmill	Yes		Microhydro		
36	Dau Tamang	RI 9 KARANG ,KARANG KHOLA	Male		45	16	23	1.84	9	28	3590	huller		no	Solar		
37	Sarki lama	Ri 6 latap,Mango khola	Male		50	20	40	4	13	28	3590	huller		no			saw mill
38	Mohan thapa mager	Mulpani 3 aarukhark,olanke khola	Male		50	3	29	0.4	12	28	3590	huller			Peltric set		
39	Bhoj B.khadka	Baireni 8 wander,Khostekhola	Male		65	9	41	1.85	12	28	3590	huller		no			
40	Menga Tamang	Lapa 3 nepeyer,Malinka khola	Male		60	17	35	2.8	11	28	3590	sawmill	Yes		Microhydro		
41	Prem b Rai	Baseri 7 Raigaun,Budhi khola	Male		60	24	45	5.4	11	28	3590	huller		no	Solar		
42	Laxman Thapa magar	Fulkhark 8 tallo kalleri	Male		60	12	27	1.6	12	28	3590	huller	Yes		Peltric set		

43	Bhim b Gurung	Fulkhark 8khark,Gagajamun a khola	Male		50	17	41	3.4	10	28	3590	huller	Yes		Peltric set		saw mill
44	Sakasing Tamang	Darkha 3 Bricet,Katesing khola	Male		50	24.5	16	1.9	12	28	2150	grinding		no			
45	Jomsai Ghale	Tipling 5 ulung	Male		70	10	40	2	10	28	2270	grinding		no			
46	Ramkrishna Chepang	Dhusa 9 bumrang	Male		75	12	35	2.1	11	28	3800	huller		no		Yes	saw mill
47	Hem b Thapa	Tipling 4 thulogaun	Male		50	24	40	4.8	9	28	2800	huller		no	Solar	Yes	
48	Shivram chepang	Jogimara kesrang	Male		70	10	62	3.1	10	28		New					holler
49	Chandra b darlami	Jyamrung 2 Thapagaun	Male		70	14	22	1.5	12	28	4000	huller	Yes		Microhydro		saw mill
50	Tanknath Sarma	Baireni 7 Nalang.Thopalkhola	Male		70	75	4.5	1.68	11	28	3030	grinding		no			
51	Krisna b tamang	Mahadevsthan 5 Rawaldanda	Male		45	8.5	22	0.98	11	28	3030	grinding		no			
52	Ramji Chepang	Dhusa 1 Bungrang	Male		50	8	16	0.64	10	28	3030	grinding		no			
53	Prem Parja	Dhusa 4 Bunrang	Male		65	9	25	1.12	11	28	3030	grinding		no			saw mill
54	Ganga b.Tamang	Semjong 6 thikhadhang	Male		60	24	15	1.8	11	28	3030	grinding	Yes		National Grid		
55	Laxmi Tamang	Mahadevsthan 4 chiuritar	Male		50	5	65	1.62	10	28	3030	grinding		no			

56	Krisna b.Thing	Benighat 5 hahuldanda	Male		40	4	28	0.56	10	28	3030	grinding	Yes		National Grid		
57	Kamansing Tamang	Semjong 5 chautara	Male		45	18	22.5	2	9	28	3030	grinding		No			
58	Khamba lama Tamang	Ri 4 Richowk	Male		35	16.5	17	1.4	9	28	3030	grinding		No			
59	shuvlal parja	Pida 7 Tarmot	Male		75	48	26	6.24	12	28	3030	grinding		No			
60	Hari b.Tamang	Satyewoti 2 goregaun	Male		70	15	24	1.8	10	28	3030	grinding		No		Yes	saw mill
61	Aetaram Tamang	Satyewoti 4 Madur	Male		75	16.5	25	2.062	10	28	3030	grinding		No			
62	Sher b.Gharti Magar	Satyewoti 7 Naesing	Male		70	12.5	17	1.06	10	28	3030	grinding		No			
63	Hark b. Lama	Gajuri 8 Rabidhan	Male		60	6	27	0.81	11	28	3030	grinding		No			
64	Hari b.Tamang	Satyewoti 8 Raktubensi	Male		60	5	67	1.67	10	28	3030	grinding		No			Oil expoler
65	Sinhabir Lama	Kiranchwok 8 tilar	Male		60	5	39	0.95	9	28	3030	grinding		No		Yes	
66	Dip b.Tamang	Gajuri 9 Nangi	Male		65	9.5	26	1.35	10	28	3030	grinding		No			
67	Bir.Tamang	Marpak 3 polchet	Male		65	5	51	1.28	12	28	3030	grinding		No			
68	Arjun Upreti	Naubise 9 kalidevi	Male		60	5	36	0.9	11	28	3030	grinding	Yes		National Grid		
69	Man b.Nepali	Chainpur 2 Mathillo Ramapur	Male		45	3.5	46	0.81	11	28	3030	grinding		no			

70	Fel Tamang	Dhola 1 Tari	Male		50	7.8	36	1.5	10	28	3030	grinding		no		Yes	
71	selcha Ghale	Tipling 1 patale	Male		40	9	21	0.95	12	28	3030	grinding		no			
72	Alina tamang	Sertung 5 Gombo	Male	Female	45	30	9	1.35	10	28	3030	grinding				Yes	holller
73	Ram b.Tamang	Serung 9Hindung	Male		50	20	10	1	9	28	3030	grinding		no			holller
74	Lekh b Bhandari	Gumdi 9 Ratmate	Male		55	9	20	0.9	9	28	3030	grinding		no			holller
75	Aas b.tamang	Semjong 9 Kewara	Male		75	10	27	1.35	10	28	3030	grinding		no			holller
76	Dal b.Gurung	Sertung 4 Chaliase	Male		65	12	16	0.96	11	28	3030	grinding		no			saw mill
77	KARMA Tamang	Jharlang 9Daprangjung	Male		50	32	43	6.8	11	28	3030	grinding		no			
78	Bam bTamang	Jharlang 6 Parang	Male		55	41	5	1.05	10	28	3030	grinding		no			
79	Bir b.Tamang	Jharlang 7 Tatopani	Male		55	4.5	60	1.35	9	28	3030	grinding		no		Yes	
80	Nemalama Tamang	Jharlang 8 Akthali	Male		45	35	8	1.4	9	28	3030	grinding		no			
81	Shree kumari Tamang	Semjong 5Luyong	Male	Female	40	12	9	0.54	9	28	3030	grinding		no			chiura mill
82	pore Ghale	Tipling 9 Lingcho	Male		40	6	30	0.9	12	28	3030	grinding		no			
83	Budha lama	Tipling 8 Durpang	Male		50	6	25	0.75	11	28	3030	grinding		no			
84	Bhete lama Tamang	Tipling 9 lingcho	Male		55	5	40	1	11	28	3030	grinding		no			
85	selcha Ghale	Tipling 1 patale	Male		55	8.5	21	0.89	10	28	3030	grinding		no			saw mill

86	Lilamman Tamang	Sertung 7 Chota	Male		55	20	9	0.9	11	28	3030	grinding		no			
87	Amber b.Tamang	Mahadevsthan 9 Jhairung	Male		55	5	37	0.925	10	28	3030	grinding		no			holller
88	Ram b.lopchan	Kiranchwok 4 Puranogaun	Male		65	6	30	0.9	10	28	3030	grinding		no			holller
89	Resam k lama	mahadevsthan 7 Chimbang	Male		65	4	55	1.1	10	28	3030	grinding		no			holller
90	Dil b.Chepang	Mahadevsthan 3 Thunrang	Male		60	5	25	0.65	10	28	3030	grinding		no			holller
91	Pardeep Adhikari	Marpak 7 Kachale	Male		60	3	100	1.5	10	28	3030	grinding		no	Solar		holller
92	Aetaram Tamang	Lapa 5 Katrong	Male		60	3	50	0.9	11	28	3030	grinding		no			holller
93	Bisnu b.sahi	Dhuwakot 4 Syaulitunde	Male		60	10	16	0.8	12	28	3030	grinding		no			holller
94	Eak b.Bhujel	Mahadevsthan 1 Chantar	Male		55	5	35	0.875	12	28	3030	grinding		no			holller
95	Sarki lama	RI 6 Latap	Male		55	20.9	40	4.18	11	28	2500	Oil expoler		no			
96	Tara lama	Ri 9 Cheprang	Male		70	34	90	15.3	11	28	2500	Oil expoler		no			
97	Bir man Tamang	Naubise 9 Thali	Male		70	4.5	5	0.111	10	28	1450	grinding		no			Oil expoler
98	Khadk b.Magar	Mahadevsthan 4 digaun	Male		75	4	45	0.9	11	28	2090	grinding		no			
99	Maun	Sertung 1	Male		60	16	16	1.28	9	28	2090	grinding		no			

	b.Tamang	Batasedanda															
100	Bonda Tamang	Sertung 2 Borang	Male		45	6	35	1.05	9	28	2090	grinding		no			
101	Sreeram Tamang	Satyedevi 5 Naising	Male		40	12	19	1.14	8	28	2090	grinding		no			
102	Purna b lama	Gajuri 8Rula	Male		50	32	41	6.56	10	28	2090	grinding		no			holller
103	Jitalama Tamang	Dharkha 3 Birchet	Male		60	19	18	1.71	8	28	2090	grinding		no			
104	Damdar Tamang	Dharkha 2 birchet	Male		60	18	30	2.7	9	28	2090	grinding		no		Yes	
105	Chandra b.Tamang	Semjong 5 semjong	Male		60	9	29	1.3	10	28	2070	grinding		no			saw mill
106	Dawa Tamang	Sertung 3 hindung	Male		60	25	15	1.85	11	28	2100	grinding		no			
107	Bhim b. Gurung	Fulkhark 4 fulkhark	Male		50	7	40	1.4	12	28	2090	grinding	Yes			Peltric set	
108	Chet b lama	Gaganpani 4Chakmake	Male		55	3	68	1.04	8	28	1900	grinding	Yes			National Grid	
109	Jamunawoti Tamangni	Darkha 3 Birchet		Female	55	35	5	0.875	9	28	2150	grinding		no			
	Total		107	2													
	Average				58.81				10.28	27.98	3268.55						

Annex 13: Analysis of Dhading District

The above information has been illustrated in the table and chart for analysis in the report.

Total No. of IWMS and TWMS

	No. of TWMS	No. of IWMS Installed	Total
No.	691	482	1173
In %	59%	41%	100%

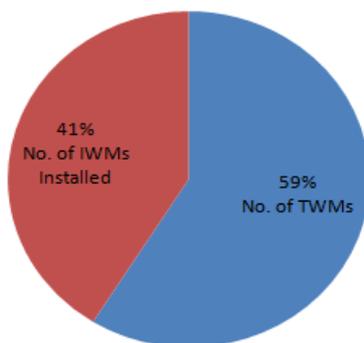
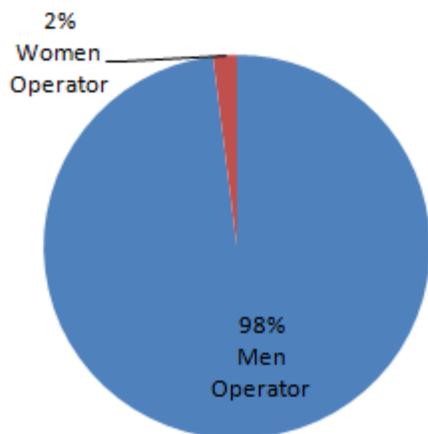


Fig. Chart showing no of TWMS/IWMS in Dhading

IWM Owner/Operator



IWM Owner/Operator	Number	In %
Men	107	98%
Women	2	2%
Total	109	100%

Fig. Men and Women as operator in Dhading

Income generation per month and % Dependency of Family on IWMs in Dhading District

Below 2,000	2,000-3,000	3,000-4,000	4,000-5,000	5,000-6,000	Total
3	20	68	8	10	109

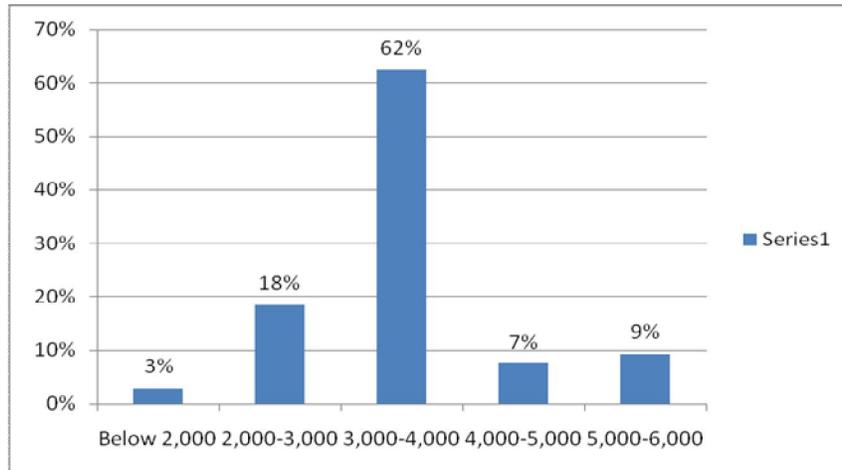


Fig. Income of IWM owners per month from IWM in Dhading

% Dependency of Family on IWMs

	Below 50 %	(50-60)%	(60-70)%	(70-80)%	Total
No. of IWMs	16	29	36	28	109
in %	15%	27%	33%	26%	100%

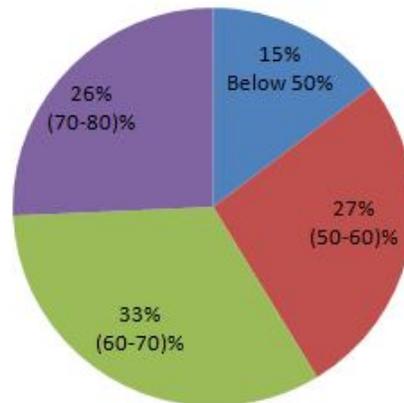
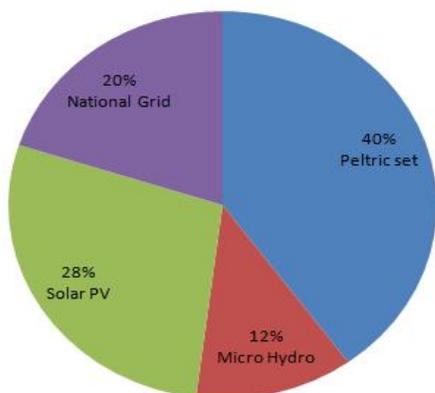


Fig. Chart Showing % of Family Dependency on IWMs

Existing Power Source



S.N	Sources	Numbers
1	Peltric set	10
2	Micro hydro	3
3	Solar PV	7
4	National Grid	5

Fig. Existing Power Sources of Dhading District

Feasibility for Electrification

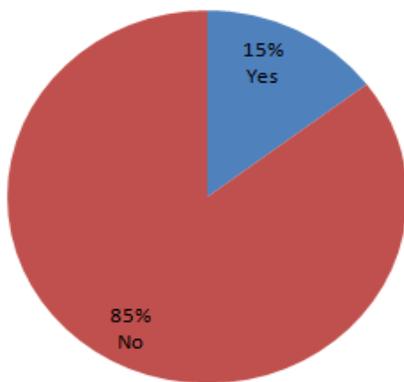
S.N	IWM Owners Name	Output Power (kW) Feaibility for electrification
1	Mangal B.Parja	1.3
2	Padam B Tamang	1.5
3	Khutram Adhikari	2.8
4	Tulasi b Baniya	1.9
5	Oon b Tamang	1.9
6	Hemant Adhikari	2.25
7	Bhakta B chepang	2.1
8	Bhim b .Magar	1.2
9	Sharan Tamang	1.6
10	chhadalama Tamang	2.1
11	Bharat subedi	1.8
12	keyersing rai	3.5
13	Jit b.Gurung	3.7
14	Bhim b.Magar	1.5
15	PURNA b.Magar	1.6
16	Rmasaran paudyal	2.5
17	Baburam tamang	3

18	Dil b Tamang	5
19	Hark b tamang	2.8
20	Kalyan Tamang	2.6
21	Dau Tamang	1.84
22	Sarki lama	4
23	Bhoj B.khadka	1.85
24	Prem b Rai	5.4
25	Sakasing Tamang	1.9
26	Jomsai Ghale	2
27	Ramkrisna Chepang	2.1
28	Hem b Thapa	4.8
29	Shivram chepang	3.1
30	Tanknath Sarma	1.68
31	Prem Parja	1.12
32	Laxmi Tamang	1.62
33	Kamansing Tamang	2
34	Khamba lama Tamang	1.4
35	shuvlal parja	6.24
36	Hari b.Tamang	1.8
37	Aaetaram Tamang	2.062
38	Hari b.Tamang	1.67
39	Dip b.Tamang	1.35
40	Bir.Tamang	1.28
41	Fel Tamang	1.5
42	Alina tamang	1.35
43	Aas b.tamang	1.35
44	Bir b.Tamang	1.35
45	Nemalama Tamang	1.4
46	Sarki lama	4.18
47	Tara lama	15.3
48	Maun b.Tamang	1.28
49	Purna b lama	6.56
50	Jitalama Tamang	1.71
51	Damdar Tamang	2.7
52	Chandra b.Tamang	1.3
53	Dawa Tamang	1.85
54	Bhim b. Gurung	1.4
55	Chet b lama	1.04

Possibilities of Enduses

S.N.	Types of End uses	No. of IWM
1	Rice hulling	18
2	Oil Expelling	2
3	Saw milling	14
4	Chiura Beater	3
5	Electrification	55

Grid Access



Grid Access	Yes	No	Total
No. of IWM	16	93	109
In %	15%	85%	100%

Fig. % of grid access in IWM sites of Dhading

Annex 14: Baseline survey of Kavre District

S. No	IWM Owners Name	Address	Gender	Head (m)	Water flow (lps)	Output Power (Kw)	Enduse type	Operation time(in term of Hrs per Day)	Income (Rs. Per month)	%age of Family depending on IWM	Grid line		Exiting Power source	Feability for electrificati on
											Yes	No		
1	OM Bahadur Dhawa	milche-6	M	60	20	4.5kw	Holar	12	5,500.00	50		No	Solar	yes
2	Hira Bahadur Thokar	Saldhara-3	M	14	30	1.5kw	Samil	11	8,000.00	70		No	Tukki	yes
3	Hira Bahadur Thing	Saldhara-7	M	15	30	1.7kw	Samil	10	9,000.00	70		No	Tukki	yes
4	Sukiman Thokar	Saldhara-5	M	5.5	100	2kw	Holar	12	8,000.00	45		No	Tukki	yes
5	Indra babadur Moktan	Milche-7	M	9.9	60	2.3kw	Holar	11	7,000.00	50		No	Tukki	yes
6	Mangale Thokar	Milche-7	M	9	60	2kw	Holar	11	6,500.00	55		No	Tukki	yes
7	Man bahadur Thokar	Saldhara-6	M	8.5	55	3.3kw	Samil	11	10,000.00	60		No	Tukki	yes
8	Lal bahadur Gole	Phalametar-4	M	7.5	100	2.9kw	Samil	13	10,000.00	65		No	Tukki	yes
9	Khawanath Dulal	Ghokule-3	M	5	70	1.3kw	Holar	10	7,000.00	65		No	Tukki	yes
10	Shyam Bahadur Bastakoti	Halede	M	69	14	3.5kw	Pisani	10	4,000.00	65		No	Tukki	yes
11	Jaya Bahadur Yonjan	Ghokule-3	M	8	75	2.3kw	Holar	9	5,500.00	60		No	Tukki	yes
12	Rajbir Thing	Phalametar-4	M	5.33	100	2kw	Holar	8	6,500.00	60		No	Tukki	yes
13	Sakuman Thokar	Phalametar-9	M	35	10	1.4kw	Samil	9	6,500.00	60		No	Tukki	yes
14	Nawaraj Thokar	Phalametar-9	M	9.5	100	3.7kw	Samil	9	8,000.00	75		No	Sholar	yes
15	Babulal Sangtan	Vimkhor-8	M	40	11	1.7kw	Samil	9	9,000.00	50		No	Tukki	yes

16	Pram dhoj Lama	Foksintar-1	M	36	35	5kw	Holar & Samil	9	11,000.00	50	No	Tukki	yes
17	Bikram sing Thokar	Phalametar-9	M	7	65	1.7kw	Samil	10	7,500.00	55	No	Tukki	yes
18	Babukaji lama	Salmekhal-7	M	6	40	1kw	Holar	10	6,500.00	55	No	Tukki	yes
19	Min bahadur shrestha	Mangaltar-6	M	4.79	80	1.5kw	Haskar poisar	11	8,000.00	65	No	Tukki	yes
20	phattabir Tamang	Vimkhor-2	M	7.33	80	2.3kw	Pisani	12	3,500.00	60	No	Tukki	yes
21	Janak Kumar waiba	Banakhu-4	M	13	100	5kw	Holar	12	7,000.00	75	No	Tukki	yes
22	Durga Bahadur pakhrin	Banakhu-7	M	41	25	4kw	Halar& samil	11	10,500.00	70	No	Tukki	yes
23	Dil bahadur Thokar	Saldhara-3	M	20	50	3.9kw	Samil	11	8,500.00	45	No	Tukki	yes
24	Sulap sing Gole	Ghokule-3	M	28	20	2kw	Pisani	12	4,000.00	45	No	Tukki	yes
25	Sanman sangtan	Milche-3	M	14	30	1.5kw	Samil	10	8,000.00	50	No	Tukki	yes
26	Surya Bahadur Thokar	Milche-7	M	6	70	1.5kw	Halar	10	6,500.00	65	No	Sholar	yes
27	Bhuddilal yonjan	Ghokule-7	M	8	100	3kw	Halar	11	7,000.00	65	No	Tukki	yes
28	Karna Tamang	Chaubash	M	4	100	1.5kw	Halar	11	7,000.00	50	No	Tukki	yes
29	Santa bahadur gole	saldhara-3	M	10	40	1.5kw	Halar	10	8,000.00	70	No	Tukki	yes
30	Prem Bahadur Ghalan	Saldhara-9	M	6	100	2.3kw	Halar	11	7,500.00	75	No	Tukki	yes
31	Ganesh Bahadur Vlon	Phalametar-7	M	12	35	1.5kw	Halar	10	8,000.00	60	No	Tukki	yes
32	Mangali maya Tamang	Banakhu-7	F	35	20	3.kw	Halar	11	6,500.00	60	No	Tukki	yes
	Average							10.53	7359.38	59.84			

Annex 15: Analysis of Kavre District

Total No. of TWMs and IWMS

	No. of TWMs	No. of IWMS Installed	Total
No	813	788	1601
In %	51%	49%	100%

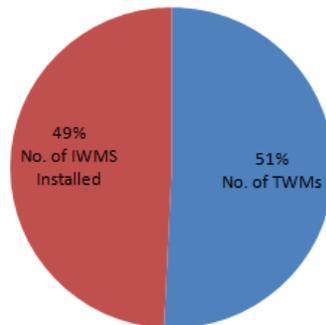


Fig. Chart showing no of TWMs/IWMS in Kavre

IWM Owner/Operator

IWM Owner/Operator	Men	Women	Total
No of IWMS	31	1	32
In %	97%	3%	100%

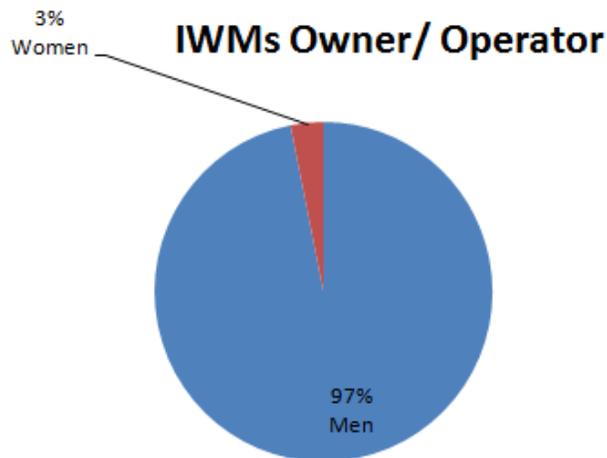


Fig. Chart showing IWM owner/ operator

Income generation per month

	Below Rs.5000	Rs (5000-7000)	Rs (7000-9000)	Rs. (9000-11000)	Total
No of IWMS	3	8	15	6	32
In %	9%	25%	47%	19%	100%

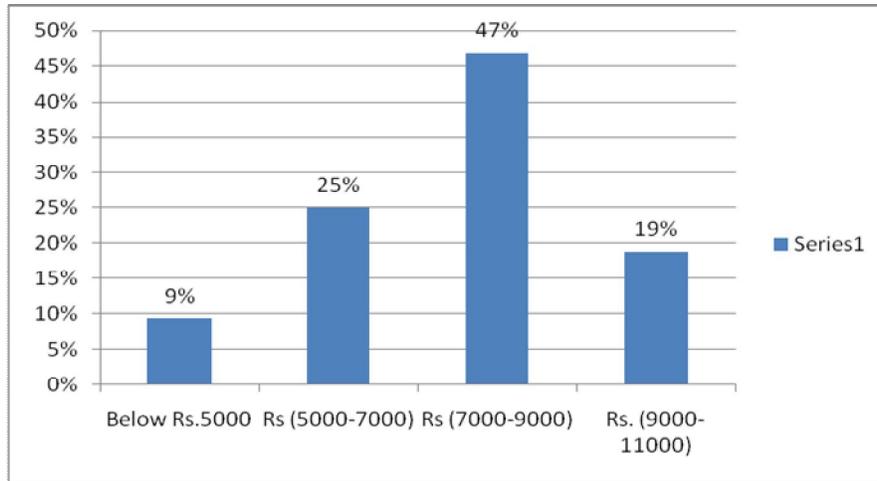


Fig Income of IWMS owners per month

Feasibility for Electrification

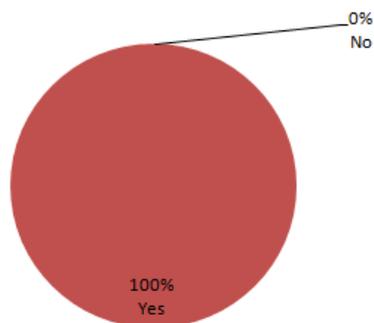
S. No	IWM Owners Name	Output Power (kW) Feaibility for electrification
1	OM Bahadur Dhawa	4.5kw
2	Hira Bahadur Thokar	1.5kw
3	Hira Bahadur Thing	1.7kw
4	Sukiman Thokar	2kw
5	Indra babadur Moktan	2.3kw
6	Mangale Thokar	2kw
7	Man bahadur Thokar	3.3kw
8	Lal bahadur Gole	2.9kw
9	Khawanath Dulal	1.3kw
10	Shyam Bahadur Bastakoti	3.5kw
11	Jaya Bahadur Yonjan	2.3kw
12	Rajbir Thing	2kw
13	Sakuman Thokar	1.4kw
14	Nawaraj Thokar	3.7kw
15	Babulal Sangtan	1.7kw

16	Pram dhoj Lama	5kw
17	Bikram sing Thokar	1.7kw
18	Babukaji lama	1kw
19	Min bahadur shrestha	1.5kw
20	phattabir Tamang	2.3kw
21	Janak Kumar waiba	5kw
22	Durga Bahadur pakhrin	4kw
23	Dil bahadur Thokar	3.9kw
24	Sulap sing Gole	2kw
25	Sanman sangtan	1.5kw
26	Surya Bahadur Thokar	1.5kw
27	Bhuddilal yonjan	3kw
28	Karna Tamang	1.5kw
29	Santa bahadur gole	1.5kw
30	Prem Bahadur Ghalan	2.3kw
31	Ganesh Bahadur Vlon	1.5kw
32	Mangali maya Tamang	3.kw

Enduse types

S.N	Types of enduse	No. of IWM
1	Grinding	2
2	Sawmill	12
3	Huller	18
	Total	32

Grid Access



Grid	Yes	No	Total
No. of IWM	0	32	32

Fig. % of Grid Access at IWM sites in Kavre

Annex 16: IWM Owners from IWMP Districts

S.N	IWM owner	Gender	Ethnic Group	Size of Family	Annual Family Income	% of mill income in total Income	ownership	operation/day (Hrs)	mill operation/month	No of HHs covered	Districts
1	Dile Tamata	Male	Marginalized	5	120,000	60	self	15	11	25	Achham
2	Jawal Singh Bista	Male	other	10	185,000	45	self	13	11	75	
3	Surat Bahadur Shah	Male	other	6	70,000	80	self	14	9	25	
4	Tek Bahadur Rawal	Male	other	7	90,000	50	self	12	11	30	
5	Uttam Bahadur Shah	Male	other	5	150,000	60	self	13	10	21	
6	Bir Bahadur Ayre	Male	other	8	165,000	40	self	11	10	31	Dadheldhura
7	Dhanuwa Sharki	Male	Marginalized	8	85,000	70	self	10	11	31	
8	Gopi Sharki	Male	Marginalized	10	90,000	70	self	11	11	45	
9	Govinda Pandey	Male	other	6	205,000	20	self	11	11	29	
10	Krishna Datta Badu	Male	other	14	110,000	60	self	10	10	29	
11	Naresh Bahadur Bohara	Male	other	6	95,000	50	Partnership	9	10	21	Darchula
12	Bhagrathi Joshi	Female	other	8	138,000	40	self	10	10	40	
13	Bhoj Raj Bhatta	Male	other	7	140,000	80	self	12	10	100	
14	Bir Singh Thagunna	Male	other	5	55,000	30	self	9	10	35	
15	Chandra Dev Bista	Male	other	5	400,000	45	self	13	10	330	
16	Daya Krishna Bhatta	Male	other	5	105,000	100	self	13	10	60	

17	Dev Ram Luhar	Male	Marginalized	5	75,000	46	self	8	10	80	
18	Hansa Datta Joshi	Male	other	6	350,000	50	self	13	10	150	
19	Jasmati Devi Mahara	Female	other	12	325,000	30	self	13	10	18	
20	Shankar Singh Dhami	Male	other	6	120,000	80	self	12	11	30	
21	Birendra Primary School				100000	100	community	8	10	200	
22	Raj Bahadur Thami	Male	Janjati	7	55000	100	self	13	10	34	
23	Bir Bahadur Tamang	Male	Janjati	2	40000	100	self	12	11	60	
24	Tirtha Raj Mainali	Male	other	7	100000	30	self	8	11	35	
25	Purna Bahadur Thami	Male	Janjati	6	60000	100	self	9	11	50	
26	Indra bahadur baniya	Male	other	7	60000	100	self	9	11	40	
27	Sagun Shrestha	Male	Janjati	4	30000	100	self	9	10	40	
28	Mithula Thami	Female	Janjati	6	45000	40	self	10	11	40	
29	Krishna Bahadur shrestha	Male	Janjati	6	100000	100	self	12	11	90	
30	Himal Basnet	Male	Janjati	4	75000	100	self	9	11	60	
31	Indra Bdr. Praja Chepang	Male	Marginalized	4	35000	100	self	8	11	35	
32	Bhim Bdr. Muktan	Male	Janjati	7	40000	40	self	10	10	50	
33	Bimala Maya Thing	Female	Janjati	7	40000	100	self	10	9	35	
34	Dinesh Kumar Majhi	Male	Marginalized	10	30000	100	self	11	11	50	
35	Saila Lagun	Male	Janjati	6	20000	30	self	11	10	40	
36	Pang Dorje Sangtan	Male	Janjati	9	20000	100	self	12	10	55	

Dolkha

Makwanpur

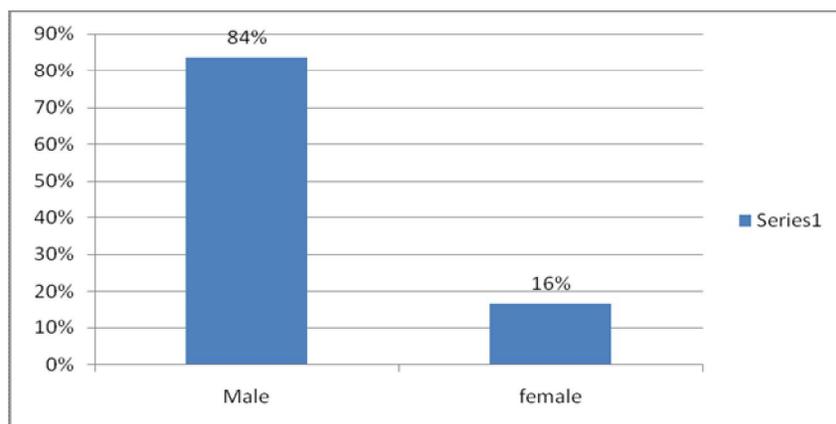
37	Ashok Waiba	Male	Janjati	7	10000	20	self	7	9	30	
38	Som Lal ghalan	Male	Janjati	5	55000	100	self	10	11	50	
39	majuwa khola Masalaa pisani				25000	100	commun ity	4	11	100	
40	Sun Bahadur Moktan	Male	Janjati	10	25000	100	self	7	12	35	
41	Kamala Maya Bhujel	Female	Janjati	8	95000	40	Partners hip	8	12	30	okhaldunga
42	Ramesh Kumar Tamang	Male	Janjati	5	55000	30	self	10	12	40	
43	Aang Dawa Sherpa	Male	Janjati	8	25000	80	Partners hip	8	11	8	
44	Dorji Sherpa	Male	Janjati	5	25000	80	self	8	11	10	
45	Doma Sherpa	Female	Janjati	5	20000	30	Partners hip	7	9	20	
46	Tek Bahadur Kuwar	Male	other	12	400000	25	self	8	12	50	Rolpa
47	Govinda Pun	Male	Janjati	13	180000	20	self	8	12	24	
48	Nawaraj Acharya	Male	other	5	250000	70	self	6	12	37	
49	Heem Bahadur Bista	Male	other	6	400000	40	self	8	12	43	
50	Keshav D.C	Male	other	6	400000	40	self	8	12	41	
51	Dalu Chand	Male	other	5	130000	70	self	8	12	50	Salyan
52	Lok Man Pun	Male	Janjati	6	100000	20	self	8	12	80	
53	Dhan Bahadur Chalaunay	Male	other	18	180000	20	self	8	12	100	
54	Sugi thapa	Female	other	8	200000	20	self	8	12	100	
55	kawale airee	Male	other	12	170000	5	self	8	12	170	

56	Belmati Jaisi	Female	other	2	130000	40	self	8	12	48	surkhet
57	Surat Rimal	Male	other	7	100000	25	self	9	12	48	
58	lal bire kami	Male	Marginalize d	8	90000	40	self	9	12	91	
59	Parsuram Chapai	Male	other	7	90000	60	self	8	12	42	
60	Nar bahadur regami magar	Male	Janjati	5	150000	70	self	8	12	64	
61	Kamal bahadur singh	Male	other	5	200000	50	self	8	12	250	
62	ram bahadur rawal	Male	other	5	160000	80	self	8	12	40	
63	puskar khatri	Male	other	7	100000	50	self	8	12	150	
64	ganga sari lamichhane	Female	other	4	90000	70	self	8	12	150	
65	chakra bahadur tarami	Female	Janjati	12	80000	80	self	8	12	100	
66	Ain Bahadur Bista	Male	other	10	115000	65	self	14	10	35	Bajhang
67	Bom Bahadur Nepali	Male	Marginalize d	8	165,000	70	self	17	11	34	
68	Dal Bahadur Jethara	Male	Marginalize d	6	60,000	35	self	11	12	35	
69	Gita Kumari Bohara	Female	other	7	60,000	35	self	11	13	65	
70	Harka Bahadur Dhat	Male	other	10	80,000	60	self	15	10	32	
71	Hema Devi Rrokaya	Female	other	5	50,000	50	self	11	10	22	
72	Janaki Devi Bohara	Female	other	11	80,000	60	self	11	10	43	
73	Lalu Joshi	Male	other	9	95,000	45	self	14	11	31	
74	Navraj Khadka	Male	other	13	220,000	70	self	16	11	35	
75	Ram Bahadur Rawal	Male	other	9	65,000	50	self	11	10	23	

76	Chakra Bahadur Kotkaine	Male	Marginalized	16	75,000	20	self	12	7	28	Doti
77	Chamva Devi Joshi	Female	other	5	100,000	30	self	12	10	57	
78	Deepak Bahadur Bohara	Male	other	7	225,000	10	self	8	9	35	
79	Gagan Bahadur Bohara	Male	other	5	45,000	40	self	10	9	38	
80	Nanda Lal Bhatta	Male	other	7	45,000	40	self	10	10	70	
81	Nar Bahadur Bist	Male	other	16	50,000	40	self	12	12	27	
82	Paduwa Kami	Male	Marginalized	11	50,000	50	self	12	10	21	
83	Praje luhar	Male	Marginalized	7	50,000	50	self	11	8	37	
84	Prem Bist	Male	other	7	45,000	55	self	12	10	85	
85	Ram Bahadur Saund	Male	other	11	55,000	30	self	8	9	22	
	Averages			7.49	112,800	56.78		10.12	10.75	57.59	

IWM Owner and operator

The information can be illustrated in the table and chart below:



Gender	Male	female	Total
No. of IWMS	71	14	85
In %	84%	16%	100%

Fig. IWM owner and operator

Ethnic Group

Ethnic group	Janjati	Marginalized	other	Total
No of IWM owners	23	12	50	85
No of IWM owners in %	27%	14%	59%	100%

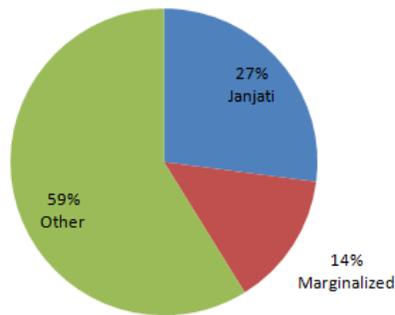


Fig. Ethnic chart

Mill Ownership

Ownership	Self	Partnership	Community	Total
No. of IWM owners	79	4	2	85
No. of IWM owners in %	93%	5%	2%	100%

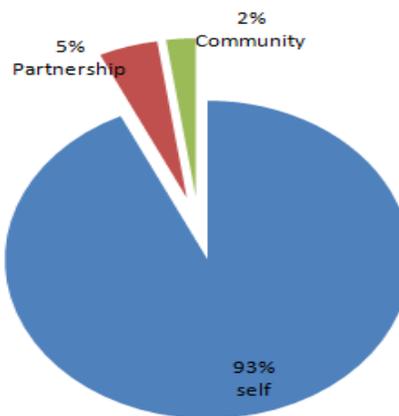


Fig. Ownership chart of IWMs

Income of IWMs Owner per Year

Income Nrs.	Below 50,000	(50,000-1,00,000)	1,00,000-1,50,000	1,50,000-2,00,000	2,00,000 & above	Total
No of IWMs owner	18	30	16	9	12	85
No of IWMs owner in %	21%	35%	19%	11%	14%	100%

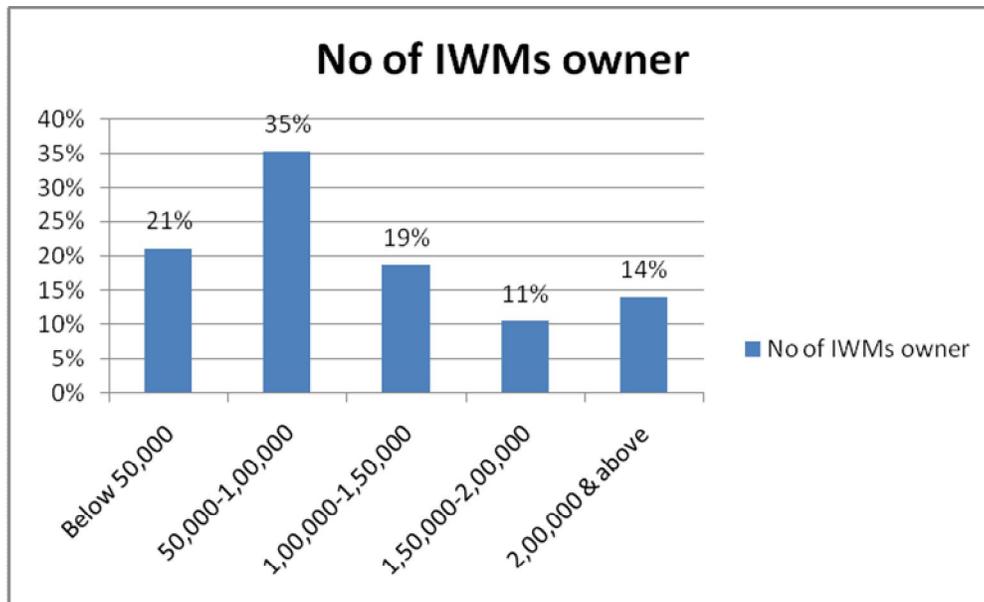


Fig Family Annual Income chart

% of Mill income in Total Income

% of mill income in total Income	below 20%	(20-40)%	(40-60)%	(60-80)%	80% & above	Total
No of IWMs owners	2	19	26	15	23	85
No of IWMs owners in %	2%	22%	31%	18%	27%	100%

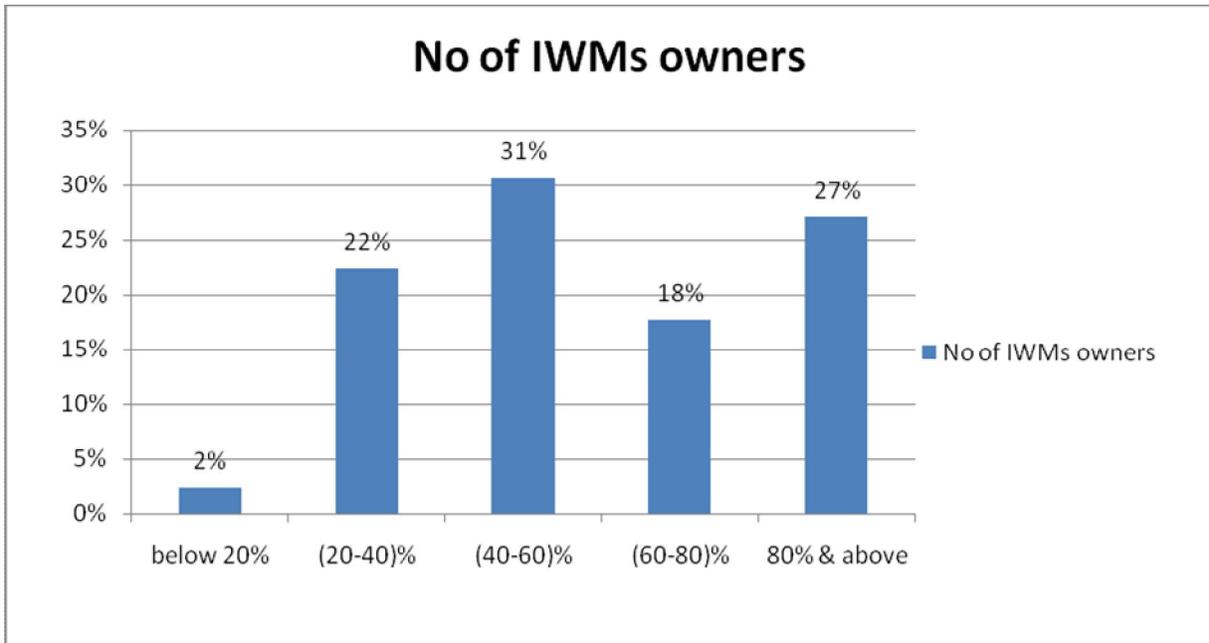


Fig. Chart showing % of mill income in total income

IWM Operation Status

mill operation/month	Below 8 months	8 months	9months	10 months	11 months	12 months	total
No of IWMs	1	1	7	28	23	25	85
No of IWMs in %	1%	1%	8%	33%	27%	29%	100%

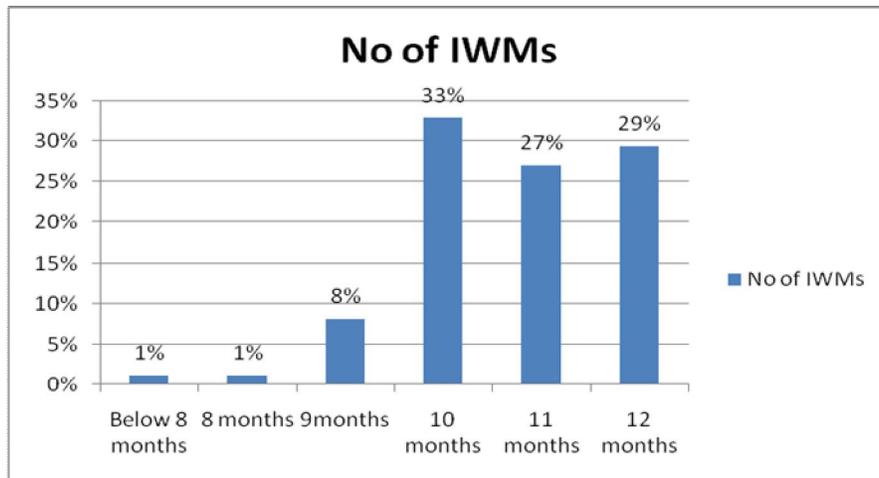


Fig IWM operation in a year

No of HHs covered by IWMs

No of HHs covered	below 25 HHs	25-50 HHs	50-75 HHs	75-100 HHs	100HHs & above	Total
No of IWMs	11	42	14	6	12	85
No of IWMs in %	13%	49%	16%	7%	14%	100%

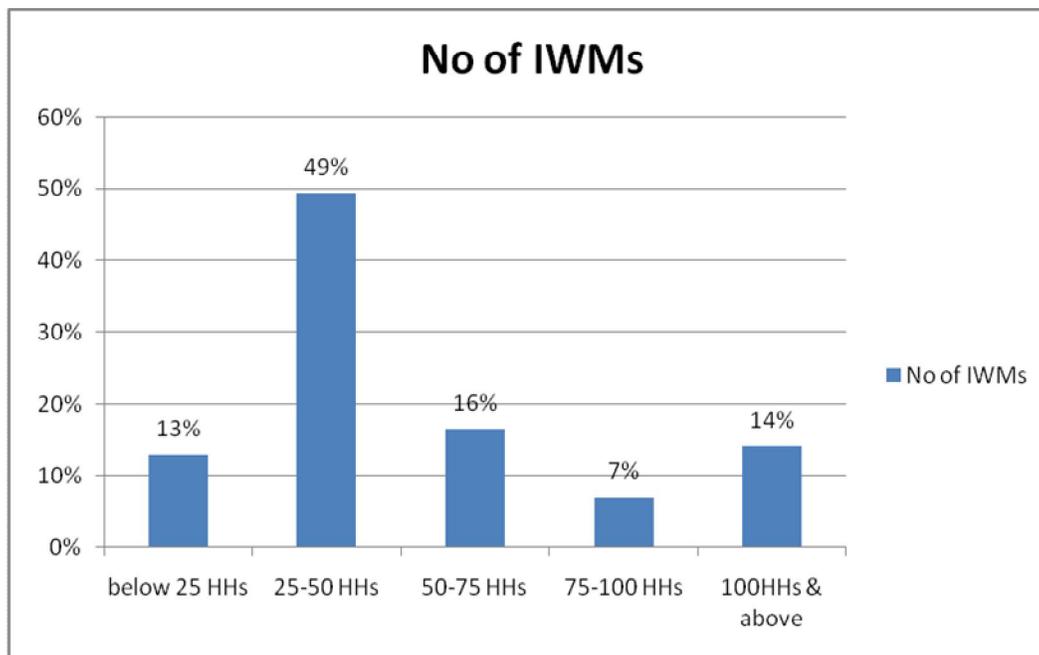


Fig.No of HHs covered

Annex 17: Analysis of 6 non IWMP districts

Family Size of Ghatta Owner

TWMs Owners	Parbat	Arghakhanchi	Gulmi	Khotang	Sankhuwashaba	Lamjung	Average family sizes of these 6 non IWMP districts
1	5	8	7	9	10	5	7.3
2	14	8	4	10	9	9	
3	5		9	6	9	4	
4	6		8	7	4	7	
5	7			9	5	4	
Average	7.4	8	7	8.2	7.4	5.8	

Occupation

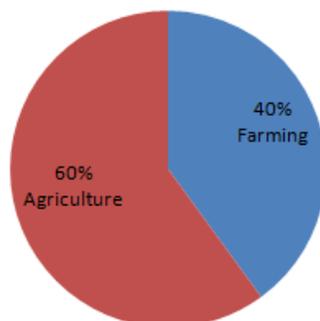


Fig. Occupation Chart of TWMs owners in non-IWMP districts

Annual Income/ Occupation/ No of HHs using Ghattas

TWMs owner	Occupation	No of HHs using ghattas	Family Income/Year
1	Farming & mill operation	50	13,000.00
2	Farming & mill operation	60	13,000.00
3	Farming & mill operation	50	12,000.00
4	Farming & mill operation	40	10,000.00
5	Farming & mill operation	150	14,000.00
6	Farming & mill operation	50	14,000.00
7	Farming & mill operation	20	15,000.00
8	Farming & mill operation	40	9,000.00
9	Farming & mill operation	33	30,000.00
10	Farming & mill operation	50	20,000.00
11	Farming & mill operation	40	5,000.00
12	Farming & mill operation	32	3,000.00

13	Farming & mill operation	33	3,000.00
14	Farming & mill operation	40	3,000.00
15	Farming & mill operation	25	6,000.00
16	Farming & mill operation	32	15,000.00
17	Farming & mill operation	25	12,000.00
18	Farming & mill operation	20	12,000.00
19	Farming & mill operation	65	20,000.00
20	Farming & mill operation	30	25,000.00
21	Farming & mill operation	65	50,000.00
22	Farming & mill operation	40	20,000.00
23	Farming & mill operation	40	10,000.00
24	Farming & mill operation	24	50,000.00
25	Farming & mill operation	30	20,000.00
26	Farming & mill operation	200	14,000.00
27	Farming & mill operation	50	15,000.00
28	Farming & mill operation	60	12,000.00
29	Farming & mill operation	70	10,000.00
30	Farming & mill operation	50	10,000.00
	Average	50.47	15,500.00

The information can be shown in the chart and table below:

Income from mill/year	Below NRs. 10,000	NRs(10,000-20,000)	NRs (20,000-30,000)	Above NRs 30,000	Total
No. of TWMS Owner	6	16	5	3	30

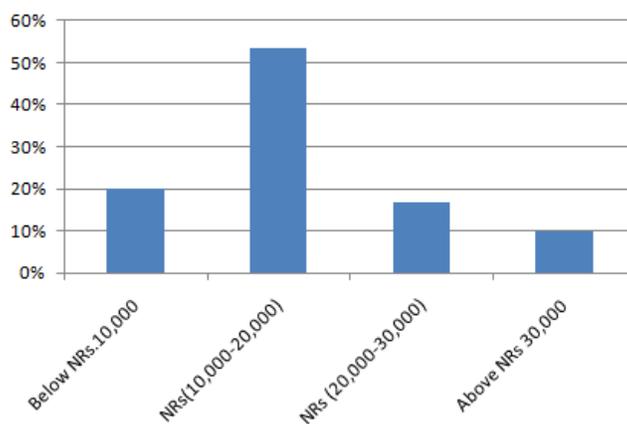


Fig. Annual income of TWM owners

No of HHs using ghattas	Below 40 HHS	40-50 HHs	50-60 HHs	Above 60 HHs	Total
No. of TWMS	11	6	6	7	30

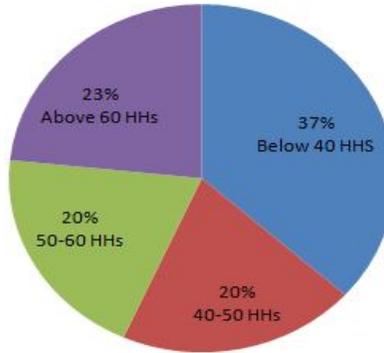
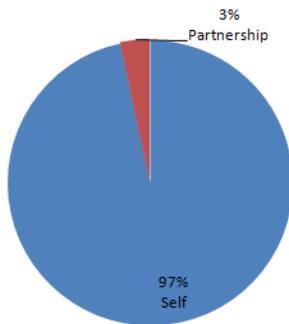


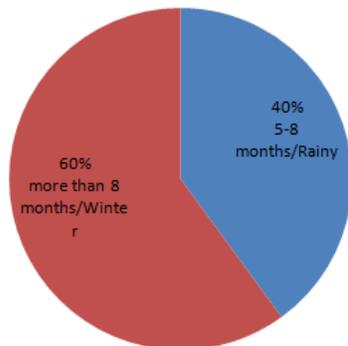
Fig. No. of HHs Ghattas Service using

Operational Status and Management of TWM



Self	Partnership	Total
29	1	30

Fig. Ghattas Ownership 6 non-IWMP districts



Months	5-8 months/Rainy	more than 8 months/Winter	Total
No. of TWMS	12	18	30

Fig. Seasonality operation of TWM in non-IWMP district

TWM Service Users

Ghattas User	Frequency of Visit/month	Distance to Ghattas(KM)	Service
1	4	0.2	Grinding
2	8	0.02	Grinding
3	8	0.08	Grinding
4	4	0.1	Grinding
5	8	0.2	Grinding
6	12	0.15	Grinding
7	16	0.15	Grinding
8	12	0.15	Grinding
9	8	0.6	Grinding
10	12	0.7	Grinding
11	5	1	Grinding
12	6	2	Grinding
13	6	0.5	Grinding
14	4	1.5	Grinding
15	8	0.7	Grinding
16	8	1	Grinding
17	4	0.5	Grinding
18	2	1	Grinding
19	3	0.2	Grinding
20	2	1	Grinding
21	2	2	Grinding
22	2	2	Grinding
23	2	2	Grinding
24	2	2	Grinding
25	2	2	Grinding
26	2	2	Grinding
27	2	2	Grinding
28	2	2	Grinding
29	2	2	Grinding
30	2	2	Grinding
31	6	1	Grinding
32	6	1	Grinding
33	6	0.5	Grinding
34	6	1	Grinding
35	6	0.5	Grinding
36	6	1	Grinding

37	6	1	Grinding
38	6	3	Grinding
39	6	2	Grinding
40	6	1	Grinding
41	6	1	Grinding
42	6	2	Grinding
43	6	1	Grinding
44	6	0.5	Grinding
45	6	0.5	Grinding
46	6	0.2	Grinding
47	6	0.2	Grinding
48	5	1	Grinding
49	5	1	Grinding
50	5	2	Grinding
51	5	1	Grinding
52	5	0.5	Grinding
53	5	0.5	Grinding
54	5	3	Grinding
55	5	3	Grinding
56	5	1	Grinding
57	6	1	Grinding
58	6	0.2	Grinding
59	5	0.3	Grinding
60	5	0.3	Grinding
Average	5.48	1.07	

The above information is also presented in the table and scatter diagram as shown below

Visit/month	Below 4 times	(4-6) times	(6-8) times	Above 8 times	Total
No of users	13	16	21	10	60

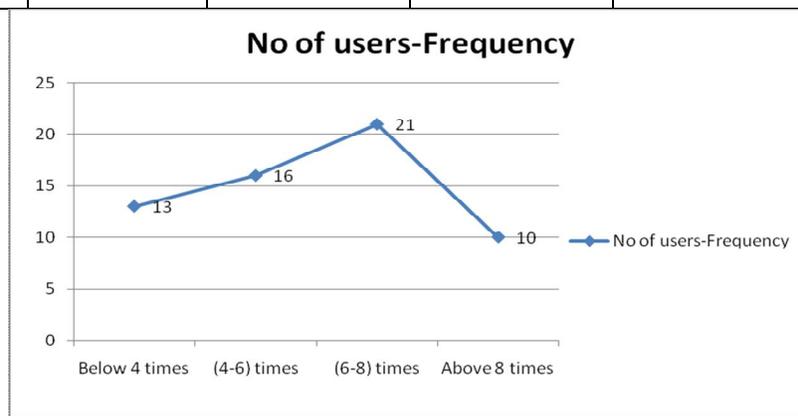


Fig. Frequency of users visiting mill

Classification of Visitors

Ghatta No.	District	Time Spent	Visitors/ Users				Remarks
			Women	Men	Oldage Person	Girl Child (Age: 8-15)	
1	Sankhuwashaba	45	1		0	2	Grains left
2		30	0		1	0	
3		30	0		0	0	Grains left
4		30	1		1	0	Grains left
5		30	0		0	0	Not in operation at that time
1	Khotang	40	0		0	0	Grains left
2		40	0		0	0	Grains left
3		50	1		0	2	Grains left
4		25	1		2	0	Grains left
5		25	0		0	0	Grains left
1	Lamjung	45	0		1	1	
2		30	2		0	0	
3		40	0	1	0	0	Grains left
4		45	0		0	0	Grains left
5		30	0		0	0	Grains left
1	Gulmi	30	2		1		
2		30	0	0	0		Not in operation at that time
3		30	0	2	0	1	
4		30	0		0	0	Grains left
5		0					
1	Parbat	45	3	0	0	0	Grains left
2		45	0	2	0	2	
3		30	0	0	0	0	Grains left
4		30	1	1	2	0	Grains left
5		25	0	0	0	0	Grains left
1	Arghakhachi	45	3	1	2	0	
2		40	0	0	3	0	
3		30	2	1	1	0	
4		0					
5		0					
Total			17	7	14	8	
Total men/women			24				
Total visitors			32				

Annex 18: Performance of IWMP Team: August 2012

Category	Indicator	Target	Achievement	Achievement in percentage
IWM Installations	# of installations			
Short Shaft		1000	898	89.90%
Long Shaft		250	75	29.60%
	Total	1250	973	77.84%
IWM Electrification	# of installations	15	6	40%
Program and Activities	# of activities			
Activities for Stakeholders				
GOA Federation support		1	Ongoing	-
GOA AGM support		3	3	100%
GOA Meeting Support		30	9	30%
Activities for SC	# of activities	5	1	20%
Local Meeting/Exhibition				
Promotion	# of activities	9	9	100%
GESI Workshop	# of activities	3	3	100%
IWM networking workshop	# of activities	1	1	100%
Case Study Publication		1	Ongoing	-
District level workshop		6	5	83.33%

Baseline survey		9	9	100%
Publication of newsletter		3	2 (1 ongoing)	
IWM Operation & Mangement Training		2	-	-
Entrepreneurship Training for Female Ghatta Owners/Operators		2	1	50%
Selection of new LPOs and kit manufacturers		27	27	100%
IWM Installation Training to staff of new LPOs		1	1	100%
	Total	103	71	68.93

Annex 19: Ad-hoc committee: Federation of GOAs, 2012

S.N.	Name	Designation	GOA Represented
1.	Mr. Man Bahadur Gole	President	Kavre
2.	Mr. Bir Bahadur Tamang	Vice President	Sindhupalchowk
3.	Mr. Shiv Sharan Shrestha	Vice President	Kavre
4.	Mr. Dhruva Bahadur Khadka	Vice President	Dolakha
5.	Mr. Ram Hari Shrestha	Secretary General	Kavre
6.	Mr. Binod Dahal	Secretary	Nuwakot
7.	Ms. Pramila Pakharin	Jt. Secretary	Kavre
8.	Mr. Govind Bhandari	Treasurer	Dhading
9.	Mr. Rajendra K.C.	-Do-	Kavre
10.	Mr. Seti Maya Dangol	-Do-	Nuwakot
11.	Ms. Nani Maiya Shrestha	-Do-	Kavre

Annex 20: Details of GOA: August 2012

S.N	Name of GOA	Registration and Renewable status	# of member				# of board member				Major activity	Advocacy done in last year	Major source of income	If secretariat staff is available			
			male	female	total	Marginalized /Ethnic	male	female	total	Marginalized /Ethnic				male	female	total	Marginalized
1	Ghatta Owners' Association, Dhading	Registered at DAO (2064-4-5 B.S.)Renewed up to 2067-2068	429	28	457	2	7	2	9	4	AGM	Coordination with DDC,DEES	-10 % from SC Membership & renew fee				
2	Ghatta Owners' Association, Dolakha	Registered at DAO 2063-08-15 Renewable at DAO 2069-04-31	206	5	211	204	9	2	11	6	monitoring of some IWM in different VDCs randomly selected	Rehabilitation of some IWMs swept away by flood. Lobbying for displacement of 5 ghattas along the	-membership fee -renew fee -application fee -10% from SC		1		

												Chandravati River due to hydro power construction case resulted to get compensations up to Rs. 100,000.						
3	District Ghatta Owner Association, Dadeldhura	Registered at DAO: 2064/12/17 Renewable at DAO 2068/04/30	124	20	144	20	7	2	9	2	AGM held, interaction program with the user groups	For REFEL program of CRT/N, on hydraulic ram pump program.					1	
4	District Ghatta Owner Association, Ba itadi	Registered at DAO 2064/08/13 Status of Renewable at DAO 2067/03/3	227	23	250	105			7	1			-Members fee					

		1															
5	Ghatta Owners' Association, Ilam	Registered at DAO (Date) 2063-11-14		17	17	45			9	4	AGM		- Membership fee -10 % from SC				
6	Ghatta Owners' Association, Jumla	Registered at DAO 2064-01-06 Status of Renewable at DAO 2068-03	127	35	162	25	1	8	9	1			- Membership fee				
7	Ghatta Owners' Association, Makawanpur	Registered at DAO 2061-4-8 Renewable at DAO 2068-9-20	743	29	772	343	9	2	11	6	AGM	, lobbying for compensation for IWM affected by the road construction on bank of Rapti khola	-service charge from subsidy -renew, membership fee - Operation of Service Centre				

8	Ghatta Owners' Association, Nuwakot	Registered at DAO (Date) 2063/2064 Status of Renewable at DAO 2066/67	97	32	129		8	1	9	4	-R &M Training on Rasuwa district	-lobbying at DDC for district level co-ordination meeting about RETs	- membership and renew fee -10 % from SC				
9	Ghatta Entrepreneur Association, Sindhuli	Year of Establishment 2066-09-09 Status of Renewable at DAO 2068-02-12	66	4	70	50	3	6	9	6	baseline survey of Sindhuli district -IWM installation in Udaypur district also		-membership fee -renewable fee -installation charge from subsidy				
10	Ghatta Owners' Association, Sindhupalchok	Registered at DAO (Date) 2061-02-04	330	6	336	242	8	1	9	7	-demo stall of IWM and other RETs on Sindhu		Service charge from subsidy -application fee				

		Status of Renewable at DAO 2068-06-09									festival		- membership and renew fee					
11	Ghatta Owners' Association, Surkhet	Year of Establishment 2064 Renew 067/068	276	21	297	102	2	7	9	3	-working as service center - Orientation & Demonstration IWM house better management -IWM product Marketing	with DEEU for RETs	Memberships, IWM promotion				1	
12	GOA Kavre	Registered at DAO 2059-9-29					8	3	11		Non-formal literacy	Heavily involved in lobbying for the benefit of	- Installation char			1	1	

		B.S. Status of Renewability at DAO Renewed up to Fiscal Year 2068-2069									classes for GOA	Ghatta owners along the Roshi River against the unilateral decision of Banepa Valley Integrated Water Supply Project (supported by ADB)	ge from Service Centre - Income from joint activities with other stakeholders - Membership fee Service Charge				
13	GOA, Lalitpur	Registered at DAO (2060-6-26), renewed upto	190	4	194	172	8	1	9	8	AGM		Memberships, IWM promotion	1			

		2067/68															
14	GOA, Ramechhap	NA	NA	NA	NA	NA	6	1	7	6	NA		Memberships, IWM promotion				
14	GOA, Kalikot	Registered at DAO (2066-4-14)	NA	NA	NA	NA	9	2	11	0	NA		Memberships, IWM promotion				
16	GOA, Pyuthan	Not registered	NA	NA	NA	NA	6	1	7	2	NA						
	Total		2815	224	3039	1310	91	39	146	60							

Annex 21: Technical Capacity of Service Centers: August 2012

S.N.	Name of Service Centre	District	Potential Capacity in				# of persons involved in IWM installation and other activities	% Contribution of IWM in total income	Major activities of Service Centre	Market area or coverage districts
			SS	LS	Total	IWM/E				
1.	Generating Income to Foster Transformation	Bajura	40	6	46	1	15	2%	Survey, Marketing and installation of IWM	Bajura
2.	Ramaroshan Vikas Samaj	Achham	70	12	82	1	27	7.35%	WaSH, ICS, IWM and micro hydro	Achham
3.	Poor and Dalit Upliftment Service Committee (PUSEC)	Dolpa	15	2	17	0	20	Recently PQ	Survey, promotion, installation	Dolpa
4.	Rural Energy Development Centre (REDC)	Jajarkot	65	5	70	1	2	40%	Survey, Promotion and Installation of IWMS including end use such as huller, husking and oil expeller	Jajarkot
5.	Rural Energy Promotion for Environment Protection Centre (REPC)	Salyan	80	12	92	0	4	60%	Survey, Promotion and Installation of IWMS	Salyan
6.	Himali Area Development Centre	Gorkha	100	20	120	0	2	Recently PQ	Survey, Promotion and Installation of IWMS	Gorkha
7.	Surma Development Society	Bajhang	100	12	112	2	2	2%	Survey, Promotion and Installation of IWMS	Bajhang
8.	Rural People Upliftment Development Program	Humla	30	10		0	1	10%	So far 1 IWM project completed only	Humla

	(RPU DP)									
9.	Development Group Nepal	Doti	100	12	112	2	3	3%	Survey, Promotion and Installation of IWMs	Doti
10.	Likhu Demba Community Development Forum (LDCDF)	Okhaldhunga	120	20	180	2	4	Recently PQ	Survey, Promotion and Installation of IWMs	Okhaldhunga
11.	Ghatta Owners Association, Surkhet	Surkhet	50	10	60	0	3	100%	Survey, Promotion and Installation of IWMs including rice huller and oil expeller	Surkhet
12.	Nepal Magar Society Service & Information Centre	Rukum	40	6	46	0	2	Recently PQ	Survey, Promotion and Installation of IWMs including rice huller and oil expeller	Rukum
13.	Ghatta Owners Association, Dolakha	Dolakha	80	25	105		3	100%	Survey, Promotion and Installation of IWMs and monitoring	Dolakha
14.	Ghatta Owners Association, Dadeldhura	Dadeldhura	70	5	75	0	3	100%	Survey, Promotion and Installation of IWMs and monitoring	Dadeldhura
15.	Renewable Energy, Water & Sanitation Service Centre (REWSSC)	Kalikot	30	5	35	2	5	30%	Survey, Promotion and Installation of IWMs including huller, oil expeller, etc.	Kalikot
16.	Karnali Community Development Centre (KCDC)	Mugu	12	6	18	1	0	Recently PQ	Survey, Promotion and Installation of IWMs, Loan for Biogas, etc.	Mugu
17.	Narayan Multipurpose Cooperativ Ltd.	Dailekh	120	24	144	5	6	20%	Survey, Promotion and Installation of IWMs, Loan for Biogas, etc.	Dailekh
18.	Laligurans Coimmunity Development Center	Rasuwa	150	20	170	0	2	5%	Survey, Promotion and Installation of IWMs	Rasuwa
19.	Ghatta	Sindhuli	70	10	80	0	5	100%	Survey, Promotion and	Sindhuli and Udaypur

	Enterpreneurs' Association, Sindhuli								Installation of IWMs	
20.	Community Rural Development Center	Darchula	140	10	150	0	4	5%	Survey, Promotion and Installation of IWMs	Darchula
21.	Rural Development Awareness Center	Rolpa	300	34	334	0	2	Recently PQ	Survey, Promotion and Installation of IWMs	Rolpa
22.	Sungava Development Organization	Ilam	25	5	30	0	1	5%	Survey, Promotion and Installation of IWMs	Ilam & Panchthar
23.	Alternative Energy Development Center	Panchthar	10	10	20	0	1	5 %	Survey, Promotion and Installation of IWMs	Panchthar
24.	Rural Mutual Development (RMD) Nepal	Dhading	40	7	47	2	4	15 %	Survey, Promotion and Installation of IWMs including IWM/E	Dhading and Gorkha
25.	Siddharth Community Development Centre	Pyuthan	22	2	24	0	2	10%	Survey, Promotion and Installation of IWMs	Pyuthan
26.	Himali Micro Hydro Eterpreneurs Association (HIMEA)	Jumla	60	4	64	1	2	30%	Survey, Promotion and Installation of IWMs including rice huller and oil expeller	Jumla
27.	Social Awareness and Development Association (SADA)	Baitadi	120	20	140	4	3	12%	Survey, Promotion and Installation of IWMs.ICS and Social mobilisation	Baitadi
28.	Ghatta Owners' Association, Kavre	Kavre	150	25	175	8	4	100%	Survey, Promotion and Installation of IWMs.ICS and Social mobilisation	Kavre, Makawanpur, Dolakha, Baitadi
29.	Ghatta Owners	Makwanpur	70	10	80	6	5	100%	Survey, Promotion and	Makawanpur

	Association, Makawanpur								Installation of IWMs.ICS and Social mobilisation	
30.	Ghatta Owners Association, Lalitpur	Lalitpur	50	10	60	4	3	100%	Survey, Promotion and Installation of IWMs.ICS and Social mobilisation	Lalitpur
31.	Ghatta Owners Association, Sindhupalchowk	Sindhupalchok	100	15	115	2	4	100 %	Survey, Promotion and Installation of IWMs	Sindhupalchowk
32.	Pahadi Samaj Kalyan Kendra	Ramechhap	60	10	70	0	2	10%	Survey, Promotion and Installation of IWMs	Ramechhap
33.	Society for Integrated Development (SID)	Nuwakot	179	26	205	3	9	50%	Survey, Promotion, Installation and follow-ups	Nuwakot,Jajarkot,Rasuwa
	Total		2,668	410	3,020	46	155			

Annex 22: Governance/GESI in SCs: August 2012

S. N.	Name of Service Centre	Status of Renewable/AGM	No. of Members				# of Board Of Directors				# of Persons involved in IWM			Mode of Communication/business deal with Clients
			Men	Women	Total	Marginalised/Dalit	Men	Women	Total	Marginalised and Ethnic Group	Men	Women	Marginalised and Ethnic Group	
1.	Generating Income to Foster Transformation	Up to 2068-2069 Last AGM held	99	76	175	47	8	3	11	1	15	11	4	Agreement and placement of order/verbal communication
2.	Ramaroshan Vikas Samaj	Up to 2068-2069 Last AGM held	102	19	121	20	6	5	11	5	3	1	26	Agreement and placement of order
3.	Poor and Dalit Upliftment Service Committee (PUSEC)	Up to 2068-2069 Last AGM held	26	21	57	3	7	4	11	9	20	0	20	Agreement and placement of order
4.	Rural Energy Development Centre (REDC)	Up to 2068-2069 Last AGM held	4	3	7	7	4	3	7	7	2	0	0	Agreement and placement of order
5.	Rural Energy Promotion for Environment Protection Centre (REPC)	Up to 2068-2069 Last AGM held	37	45	82	2	8	3	11	2	4	0	0	Information sharing through IWMP and agreement
6.	Himali Area Development Centre	Up to 2068-2069 Last AGM held	10	11	21	19	6	5	11	10	2	0	0	Verbal and agreement
7.	Surma Development Society	Up to 2068-2069 Last AGM	30	7	37	11	6	3	9	3	3	5	2	Direct Communication and placement through order

		held												and agreement
8.	Rural People Upliftment Development Program (RPUDP)	Up to 2068-2069 Last AGM held	6	3	9	4	6	3	9	4	1	0	1	Direct Communication and through placement of order and agreement
9.	Development Group Nepal	Up to 2068-2069 Last AGM held	38	11	49	7	8	3	11	3	3	0	3	Direct Communication and through placement of order and agreement
10.	Likhu Demba Community Development Forum (LDCDF)	Up to 2068-2069 Last AGM held	712	871	1583	8	8	5	13	8	4	0	3	Direct Communication and through placement of order and agreement
11.	Ghatta Owners Association, Surkhet	Up to 2068-2069 Last AGM held	276	21	297	102	7	2	9	3	3	0	3	Direct Communication and through placement of order and agreement
12.	Nepal Magar Society Service & Information Centre	Up to 2068-2069 Last AGM held	163	57	210	0	4	3	7	0	2	0	0	Direct Communication and through placement of order and agreement
13.	Ghatta Owners Association, Dolakha	Up to 2068-2069 Last AGM held	306	5	311	204	9	2	11	9	3	0	3	Direct Communication and through placement of order and agreement
14.	Ghatta Owners Association, Dadeldhura	Up to 2068-2069 Last AGM held	124	20	144	20	7	2	9	2	3	0	3	Direct Communication and through placement of order and agreement
15.	Renewable Energy, Water & Sanitation Service Centre (REWSSC)	Up to 2068-2069 Last AGM held	6	2	8	0	5	2	7	0	5	0	0	Direct Communication and through placement of order and agreement
16.	Karnali Community Development Centre (KCDC)	Up to 2068-2069 Last AGM held	34	19	53	21	6	5	11	5	9	5	4	

17.	Narayan Multipurpose Cooperative Ltd.	Up to 2068-2069 Last AGM held	34	3356	3990	0	7	4	11	5	6	0	6	
18.	Laligurans Community Development Center	Up to 2068-2069 Last AGM held	36	30	62	6	5	4	9	6	2	1	3	
19.	Ghatta Entrepreneurs' Association, Sindhuli	Up to 2068-2069 Last AGM held	66	4	70	4	5	3	8	8	4	1	3	
20.	Community Rural Development Center	Up to 2068-2069 Last AGM held	30	22	52	18	7	4	11	3	4	0	4	
21.	Rural Development Awareness Center	Up to 2068-2069 Last AGM held	12	25	37	20	4	3	7	6	2	0	2	
22.	Sungava Development Organizatio	Up to 2068-2069 Last AGM held	43	40	83	44	5	4	9	8	1	0	1	
23.	Alternative Energy Development Center	Up to 2068-2069 Last AGM held	17	14	31	26	5	2	7	5	1	0	1	
24.	Rural Mutual Development (RMD) Nepal	Up to 2068-2069 Last AGM held	4	3	7	2	4	3	7	2	3	1	1	
25.	Siddharth Community Development Centre	Up to 2068-2069 Last AGM held	34	18	52	19	7	4	11	2	2	0	0	
26.	Himali Micro Hydro Eterpreneurs	Up to 2068-2069 Last AGM	8	3	11	3	8	3	11	3	2	0	2	

	Association (HIMEA)	held												
27.	Social Awareness and Development Association (SADA)	Up to 2068-2069 Last AGM held	14	11	25	6	5	4	9	6	2	1	0	
28.	Ghatta Owners' Association, Kavre	Up to 2068-2069 Last AGM held	784	37	821	639	8	3	11	10	4	1	0	
29.	Ghatta Owners Association, Makawanpur	Up to 2068-2069 Last AGM held	347	29	376	4	9	2	11	9	5	1	3	
30.	Ghatta Owners Association, Lalitpur	Up to 2068-2069 Last AGM held	190	4	194	172	8	1	9	8	3	0	3	
31.	Ghatta Owners Association, Sindhupalchowk	Up to 2068-2069 Last AGM held	330	6	336	4	8	1	9	8	3	1	4	
32.	Pahadi Samaj Kalyan Kendra	Up to 2068-2069 Last AGM held	26	16	42	22	5	4	9	5	2	0	2	
33.	Society for Integrated Development (SID)	Up to 2068-2069 Last AGM held	498	155	653	104	6	1	7	0	6	3	0	
		Total	4446	4964	10006	1568	211	103	314	165	134	32	107	-

Annex 23: Performance of Service Centres : August 2012

S.N.	District	Name of Service Centre	Target Indicator (# of IWM installation)	Achievement by type			Total % of achievement
				SS	LS	IWM/E	
1.	Bajura	Generating Income to Foster Transformation	40	8	0	0	20.00
2.	Achham	Ramaroshan Vikas Samaj	50	30	0	0	60.00
3.	Dolpa	Poor n Dalit Upliftment Service Committee (PUSEC)	5	0	0	0	0.00
4.	Jajarkot	Rural Energy Development Centre (REDC)	60	20	1	0	35.00
5.	Salyan	Rural Energy Promotion for Environment Protection Centre (REPC)	60	36	3	0	65.00
6.	Gorkha	Himali Area Development Centre	70	12	0	0	17.14
7.	Bajhang	Surma Development Society	50	41	0	0	82.00

8.	Humla	Rural People Upliftment Development Program (RPUDP)	5	0	0	0	0.00
9.	Doti	Development Group Nepal	80	56	1	0	71.25
10.	Okhaldhunga	Likhu Demba Community Development Forum (LDCDF)	60	54	5	0	98.33
11.	Surkhet	Ghatta Owners Association, Surkhet	40	54	11	0	162.50
12.	Rukum	Nepal Magar Society Service & Information Centre	70	0	0	0	0.00
13.	Dolakha	Ghatta Owners Association, Dolakha	40	27	14	0	102.50
14.	Dadeldhura	Ghatta Owners Association, Dadeldhura	15	40	1	0	273.33
15.	Kalikot	Renewable Energy, Water & Sanitation Service Centre (REWSSC)	40	37	0	0	92.50
16.	Mugu	Karnali Community Development Centre (KCDC)	10	0	0	0	0.00
17.	Dailekh	Narayan Multipurpose Co-operative Ltd.	80	73	1	0	92.50
18.	Rasuwa	Laligurash Community Development Centre	10	20	0	0	200.00

		(LCDC)					
19.	Sindhuli	Ghatta Entrepreneur Association	60	57	13	0	116.67
20.	Darchula	Community Rural Development Society-Nepal	40	42	0	0	105.00
21.	Rolpa	Rural Development and Awareness Society Nepal	70	6	0	0	8.57
22.	Ilam	Sungava Development Organization	10	0	0	0	0.00
23.	Panchthar	Alternative Energy Development Center	10	0	0	0	0.00
24.	Dhading	Gramin Apasi Bikas	40	28	5	0	82.50
25.	Pyuthan	Siddhartha Samudik Gramin Bikas Kendra	10	4	0	0	40.00
26.	Jumla	Himali Micro Hydro Entrepreneurs Association	40	36	1	0	92.50
27.	Baitadi	Social Awareness and Development Center	30	72	4	1	253.33
28.	Kavre	GOA - Kavre	15	34	3	4	246.67
29.	Makwanpur	GOA - Makwanpur	40	23	2	1	62.50
30.	Lalitpur	GOA - Lalitpur	10	0	0	0	0.00

31.	Sindhupalchok	GOA - Sindhupalchok	30	25	2	0	90.00
32.	Ramechhap	Pahadi Samaj Kalyan Kendra	20	7	3	0	50.00
33.	Nuwakot	Society for Integrated Development	40	56	5	0	152.50

Annex 24: Technical Capacity of Kit manufacturers: August 2012

S.N.	Name of Manufacturer	Location	Potential Capacity in manufacturing/year in #			# of persons involved in IWM manufacturing	% Contribution of IWM in total income	Major activities in manufacturing	Market area or coverage districts
			SS	LS	Total				
1.	Siddharth Engineering Works	Nepalgunj	40	10	50	3	5%	Nozzle, Metallic Stand, trash rack, Bell Mouth	Surkhet, Salyan and Kalikot
2.	Malika Engineering & Mechanical Workshop Pvt. Ltd.	Dhangadhi	800	200	1000	7	5.5%	Major kit items and end use installations like huller, seller, saw mill oil expeller and 3 electrifications completed	Dadeldhura, Kailali, Achham, Bajura, Darchula, Bajhang and Doti
3.	Rijwan Engineering Udyog	Nepalgunj	300	50	350	5	10%	Nozzle, Metallic Stand, trash rack, Bell Mouth	Jumla, Kalikot, Dolpa, Salyan, Dailekh and Pyuthan
4.	Asian Metal Power Udyog	Dadeldhura	650	150	800	5	10%	IWM, ICS part, Truss, gas welding and fabrication and installation of huller, oil, expeller, saw mill	Dadeldhura, Doti, Bajhang, Darchula, Baitadi, Achham and Bajura.
5.	Mahalaxmi Engineering Wroks Pvt. Ltd.	Hetaunda	240	60	300	7	15%	Pulley boring, IWM frame manufacturing and installation of huller, oil expeller	Makawanpur, Dolakha, Ramechhap, Sindhupalchowk, Nuwakot, Surkhet, Rukum and Kalikot

								and saw mill	
6.	Banepa Falam Udyog	Banepa	300	200	500	2	20%	IWM Kit, ICS, Gasifier and Agriculture tools	Ramechhpa, sindhuli, Dolakha, Sindhupalchowk, Kavre, Lalitpur, Nuwakot, Rasuwa and Dhading
7.	DL Energy Concern Pvt. Ltd.	Kathmandu	600	120	720	6	Just recently started the process	IWM kit and components of IWM/E	Surkhet, Rasuwa and Dhading
8.	Prabidhi Utthan Kendra	Hetaunda	9,500	500	10,000	28	7%	IWM, ICS, Peltric set, micro hydro and bio briquette related works including electrification 5 nos.	Baitadi, Dadheldhura ,Dailekh, Doti, Bajura, Bajhang, Salyan, Darchula, Jagarkot, Humla, Surkhet, Dolakha Ramechhap, Sindhupalchowk,Kavrepalanchowk, Nuwakot, Dhading,Okhaldhunga,Gorkha,Ilam, Panchthar Rasuwa, Sindhuli, Makwanpur and Lalitpur
		Grand/ Total	12,430	1,290	13,720	63	-	-	-

Annex 25: Governance/Gender & Social Inclusion of Kit manufacturers: August 2012

S.N.	Name of Manufacturer	Registered at	# of Shareholders				# Persons involved in IWM manufacturing			Mode of Communication/business deal with Clients	Remarks
			Men	Women	Total	Marginalised and Ethnic Group	Men	Women	Marginalised and Ethnic Group		
1.	Siddharth Engineering Works	DSCI Office/Proprietorship	1	0	1	1	3	0	3	Agreement and placement of order/verbal communication	
2.	Malika Engineering & Mechanical Workshop Pvt. Ltd.	Office of The Company Registrar	3	0	3	0	5	2	3	Agreement and placement of order	
3.	Rijwan Engineering Udyog	DSCI Office/Proprietorship	1	0	1	1	5	0	5	Agreement and placement of order	
4.	Asian Metal Power Udyog	Office of The Company Registrar	1	1	2	0	5	0	1	Agreement and placement of order	
5.	Mahalaxmi Engineering Wroks Pvt. Ltd.	Office of The Company Registrar	3	0	3	1	7	0	7	Information sharing through IWMP and agreement	
6.	Banepa Falam Udyog	DSCI Office/Proprietorship	1	0	1	1	2	0	2	Verbal and agreement	
7.	DL Energy Concern Pvt.	Office of The	1	1	2	0	5	1	3	Direct Communication and through placement of order	

	Ltd.	Company Registrar								and agreement	
8.	Prabidhi Utthan Engineering Kendra	DSCI Office/Partnership	1	2	3	0	25	3	25 (Dalit-10)	Direct Communication and through placement of order and agreement	
		Total	13	4	17	4	57	6	49	-	

Annex 26: Technical Capacity of IWM Electrification Installer: August 2012

S.N.	Name of Installer	Location	Capacity in Installation/year in #	# of persons involved in IWM Electrification	% Contribution of IWM in total income	Major activities in Installation Procedure	Market area or coverage districts
1.	Himchuli Consultancy Pvt. Ltd.	Banepa-05, Kavre	20	3	15%	DFS, Site Verification and supervision, Manufacturing, Installation (Civil, Mechanical and Electrical parts(IGC,Generator, Ballast Load, Power-house Wiring and Transmission &Distribution), testing & Commisioning)	Kavre, Surkhet, Salyan and Kalikot
2.	Ujyalo Consultancy Pvt. Ltd.	Chautara-8, Sindhupalchowk	5	2	5%	Do	Surkhet, Sindhupalchowk, Nuwakot a
3.	Technology Upliftment Engineering Centre	Thanavara ng 11, Hetauda, Makawanpur	15	2	5%	Do	Makawanpur, Sindhuli, Okhaldhunga, Dolakha, Ramechhap, Sindhupalchowk, Nuwakot, Surkhet, Rukum and Kalikot
4.	Renewable Nepal Alternative Energy Pvt. Ltd.	Balaju-16, Kathmandu					
5.	Nepal Power Solution Pvt. Ltd.	Palpasa Road Siddhartha Path-24, Hetauda, makawanp	5	2	5%	Do	Makawanpur, Dolakha, Ramechhap, Sindhupalchowk, Nuwakot, and some mid-west districts

		ur					
6.	Design Point Pvt. Ltd.	Jwagal-10, Lalitpur					
7.	Nuwakot Prabidhi Tatha Pariyojana Sewa Kendra Pvt. Ltd.	Bidur-03, Nuwakot					
8.	Maa Shakti Engineering and Hydropower Pvt. Ltd.	Gatthaghar -15, Bhaktapur					
9.	Singhabahini Engineering Works	Mayanglung-02, Terhathum	10	2	5%	Do	Eastern and Central part of Nepal
10.	Khanal Engineering and Industries	Butwal Industrial Estate, Butwal					
11.	Dhaulagiri Hydro Consult Butwal Pvt. Ltd.	Butwal Industrial Estate, Butwal					
12.	Siddhartha Engineering Works	Nepalgunj Industrial Estate, Building No.22, Nepalgunj	5	2	5%	Do	Mid west and Central Part of Nepal
13.	Institute of Rural Technology Development Pvt. Ltd.	Butwal Industrial Estate, Butwal					
14.	DL Energy Concern Pvt. Ltd.	Mitranagar -29, Kathmandu	15	3	10%	Do	Baitadi, Dadheldhura, Dailekh, Doti, Bajura, Bajhang, Salyan, Darchula, Jagarkot, Humla, Surkhet, Dolakha Ramechhap, Sindhupalchowk, Kavrepalanchowk, Nuwakot, Dhading, Okhaldhunga, Gorkha, Ilam,

							Panchthar Rasuwa, Sindhuli, Makwanpur and Lalitpur
15.	K P Byawasayi Sewa JV Synergy Company Pvt. Ltd.	Birendranagar, Surkhet	3	1	5 %	Do	Surkhet, Jajharkot, Dailekh and Jumla
		Grand/ Total	78	17			

Annex 27: Governance/Gender & Social Inclusion of IWM Electrification Installer: August 2012

S.N.	Name of Installer	Registered at	# of Shareholders				# Persons involved in IWM Electrification			Mode of Communication/business deal with Clients	Remarks
			Men	Women	Total	Marginalised and Ethnic Group	Men	Women	Marginalised and Ethnic Group		
1.	Himchuli Consultancy Pvt. Ltd.	DSCI Office/Proprietorship	3	0	3	1	3	0	1	Agreement and placement of order/verbal communication	
2.	Ujyalo Consultancy Pvt. Ltd.	Office of The Company Registrar	2	0	2	0	2	0	0	Agreement and placement of order	
3.	Technology Upliftment Engineering Centre	DSCI Office/Proprietorship	2	0	2	0	2	0	0	Agreement and placement of order	
4.	Renewable Nepal Alternative Energy Pvt. Ltd.	Office of The Company Registrar									Up to today, IWM/E is not performing though it has capacity to do it
5.	Nepal Power Solution Pvt. Ltd.	Office of The Company Registrar	2	0	2	2	2	0	2	Information sharing through IWMP and agreement	
6.	Design Point Pvt. Ltd.	DSCI Office/Proprietorship									
7.	Nuwakot Prabidhi Tatha Pariyojana Sewa Kendra Pvt. Ltd.	Office of The Company Registrar									
8.	Maa Shakti Engineering and Hydropower Pvt. Ltd.										
9.	Singhabahini Engineering	DSCI Office/Partnership	2	0	2	0	2	0	0	Direct Communication and through placement of order	

	Works										and agreement	
10.	Khanal Engineering and Industries											
11.	Dhaulagiri Hydro Consult Butwal Pvt. Ltd.											
12.	Siddhartha Engineering Works	Office of The Company Registrar	1	0	1	1	2	0	1		Direct Communication and through placement of order and agreement	
13.	Institute of Rural Technology Development Pvt. Ltd.											
14.	DL Energy Concern Pvt. Ltd.	Office of The Company Registrar	1	0	1	0	3	0	0		Direct Communication and through placement of order and agreement	
15.	K P Byawasayi Sewa JV Synergy Company Pvt. Ltd.	Office of The Company Registrar	1	0	1	1	1	0	1		Direct Communication and through placement of order and agreement	
		Total			14	5	17		5		-	

Annex 28: The subsidy rates and changes over years

Type of IWM	Subsidy in NPR
2003	
Short Shaft	10,000.00
Long Shaft	20,000.00
IWM/E	-
2007	
Short Shaft	9,000.000
Long Shaft	18,000.00
IWM/E	-
2008	
IWM/E	60,000.00/kW
2009	
Short Shaft	12,000.00
Long Shaft	27,000.00
IWM/E	60,000.00/kW

Annex 29: Map of Nepal and Improved Water Mill Programme Districts



