

## WEALTH RANKING AND LIVELIHOOD ANALYSIS FOR MICROWATERSHED DEVELOPMENT

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Integrated watershed management is an interdisciplinary approach aiming at rational utilization of natural resources while achieving equity in socio economic development of all sections of the community for increasing productivity of drylands on a sustainable basis. ( HP Singh and T K Bhati 1993). Emphasis has been laid upon the socio economic status of poor on par with rich in watershed development under DPAP programs of Ministry of Rural development .The study was aimed at assessing the real poor and livelihood patterns of all economic groups through PRA techniques of wealth ranking and livelihood analysis.

PRA analysis revealed that the following factors influence the decision on land use system in the village. ( Velayutham , M. *et al*, 2001 ) These are (i) Economic situation of the farmer (ii) short term family needs (iii) Level of perception or understanding (iv) Social status (v) fragmentation of land (vi) Risk management (vii) proximity of land and (viii) migration (labour).

There are inequalities and differences in wealth in every community. These differences influence or determine people's behavior, coping strategies, and views. Wealth ranking is a versatile and flexible tool, which can be very useful. It is a more trustworthy process as compared to a formal questionnaire survey in identifying the rural poor. The percentage of accuracy in identifying the economic levels of households was determined to be 96.7% ( Rajaratnam *et al* 1992) .

According to Meera Kaul Shah (1990 ), household categorization is an important tool to assess poverty. It not only provides an insight into how community members categorize households, and distribute them amongst the household categories, it also explains the criteria on the basis of which the community perceives internal differences.

The objective of wealth ranking is to identify the type of indicators used by the community to classify their economic status. The key- informants classified the households into poor, middle, and rich by use of Grandin method of card sorting. Each household was represented by a card which was sorted into piles by the informants according to their criteria.

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Livelihood analysis is a sequel to wealth ranking where each representative of the wealth group assessed income and expenditure pattern through distribution of seeds/ stones into various sources of income and expenditure.

The study was conducted to understand the socio economic conditions through wealth criteria as expressed by stakeholders and the assessment of income and expenditure statements reflecting livelihood pattern existing in the area for sustainable development of a microwatershed in Nallavelli village located in Ibrahimpatnam block, Yacharam mandal of Rangareddy district.

## **Methodology**

PRA methodology was used to assess the wealth and livelihood of stakeholders of the micro-watershed. Wealth ranking was undertaken by key informants based on criteria perceived by them. This technique was used to find out the socio-economic status of an individual household in the watershed.

Each individual belonging to the various wealth categories was subsequently subjected to livelihood analysis for understanding the source of income and expenditure pattern of various category of stakeholders of the watershed.

## **Technique of Wealth Ranking**

The technique of wealth ranking was developed by Barbara E Grandin in 1988 and a stepwise procedure of wealth ranking is as follows.

(A) Initially general background activities are stated which include discussion on levels of communication to obtain words in the local language; discussion on local concepts of wealth and decision on words or phrases to be used and definition of household in the local language and gathering suitable words or phrases.

(B) The next step is discussion on community specific background activities. Here we enlist names of head of family of households; (There are noted on paper to verify and number them for ready reference) and prepare index cards; the next task is to choose informants to explain the technique which is crucial to the exercise is followed by finding a quiet place to perform this exercise.

(C) The next step is to explain to the informant the purpose of the research, how the rich are different from others in the area; how problems of rich and poor are different in nature and the chosen word for wealth in the local language, and household concept, to mean the whole household.

(D) This is followed by actual card sorting. The informant is told how the process works. He/ She is left free to make as many piles as he/ she wants with

freedom to change numbers during the exercise, the cards are shuffled and one by one, the informant puts cards in various piles and also reviews each pile to make sure that no more than 40 per cent are subdivided in this manner. The PRA organizers then write down household numbers by pile on a recording sheet for analysis. Each exercise is followed up with discussion with informants. For instance, the informant is asked about the characteristics of each group of farmers grouped in each of the piles. All responses are recorded by pile number. Informants were also asked the basis of their perceptions about these farmers. The next action is to repeat steps 'C' and 'D' with two to three informants.

(E) At the end of this interactive exercise the average scores are computed and grouped. Household numbers are written down in a line and score of each household by each informant is noted.

Analysis for wealth ranking is done on the basis of the following formula:

$$\text{Score : } \frac{\text{Number of pile of household}}{\text{Total number of piles}} \times 100$$

Pile 1 denotes the richest household in the village.

Computation of average scores for each household is arrived at by dividing its total score by the number of its scores. Each household must have at least two scores so as to be included. Average score for each household is indicated in large numbers on the index cards and these index cards are arranged in order from lowest to highest average score i.e. rich to poor. This information is copied on a sheet of paper in the same order: the position number, the household number and average score. Subsequently the households were divided into 4 groups of near equal size.

### **Technique of Livelihood analysis**

Livelihood analysis is done by preparing annual income and expenditure statements using simple PRA method developed by Joachim Theis and Heather M Grady 1991. A bowl containing 100 seeds is used by representatives from each wealth category – Rich, Middle, Poor and Very poor category to indicate income and expenditure levels. Each member is asked to allocate a few seeds under each source of income and similarly for items of expenditure. The number of seeds under each source of income indicates the proportion/ percentage contribution for each item under income and expenditure.

**Study Area:** Nallavalli village is located 70 km to the SE of Hyderabad city on Nagarjunasagar highway. It falls in the jurisdiction of Ibrahimpatnam block of Yacharam mandal. The village area is 3200 ha and has 31 micro-watersheds. The present study pertains to one microwatershed covering 269 ha. of which



only 64 percent of area is under cultivation and the remaining land is under forestry. The uncultivable waste, non-agricultural land, permanent pastures and other fallows constitute a negligible area. Even land in some of the hillocks has been redistributed by Govt. to landless labour of the village. Social mapping indicated 25% SC population, 55% OBC, 12.5% Muslim and 7.5% Reddys. There are 150 households within the selected watersheds, which accounts for 25% of the village population.

Two main soil types- fine red soil locally called (erragachu) and dark red soil called ( erra dubba) are found which determine the land use pattern within the micro watershed.

The main cropping pattern is sole inter- cropping and mixed cropping where crop rotation is followed. While paddy is grown both in Kharif and Rabi seasons, all other crops namely castor, sorghum and rainfed paddy are grown in Kharif . There are 11 borewells, which are used to irrigate rice, vegetables, and some fruit crops.

Some of the problems identified indicated that topography is undulating with multiple slopes since, conservation measures are not in vogue, soils are exposed to erosion. Semilooper and red hairy caterpillar in castor and pod borer in pigeon pea are prominent pests. Weeds like celotia are prominent, as rainfed crops remain unweeded as it is costly.

The results from wealth ranking and livelihood analysis at Nallavelli village are presented below:

## **Results And Discussions**

### **a) Wealth ranking**

**Table - 1 Pattern of wealth distribution among beneficiary households in microwatershed (Nallavelli village)**

<b>Category</b>	<b>Average Score</b>	<b>Frequency</b>	<b>Percentage</b>
Rich	25-45	49	32
Middle	46-66	53	35
Poor	67-85	14	9
V. Poor	86-100	36	24
Total	-	152	100.00

**Table- 2 Criteria expressed by beneficiaries for classification of wealth groups**

Rich	Employees , more land, economically sound , Landlords > 10 acres, business men- general stores etc.,
Middle	Economically sound , 5-10 acres of own land , living on their own without depending on others, cultivate own lands and leased lands and possess livestock like sheep and goats
Poor	Hard working people, 3-4 acres of own land, cultivate leased in lands and wage labourers.
V poor	Labourers , < 1 acre or 2 acres.

From the Table 1 & 2 it was clear that household beneficiaries were categorized by their own people which indicated that '**rich**' are those who are either employees i.e who get regular monthly income; or those who possess more than 10 acres of cultivable land; or those who have business like provision stores. According to wealth ranking 32% are rich and majority are farmers having cultivable land, with 2 % of employees and business class.

The '**middle**' constituted 35% of households of micro watershed. They are characterized as economically sound and are not dependent upon anybody for livelihood. They derive income from cultivable land of 5-10 acres and from sheep and goat. They sometimes lease land from absentee landlords. Sheep and goats form part of the drought mitigation strategy.

'**Poor**' and '**Very poor**' comprised of 9% and 24% respectively as per the wealth ranking of households . Their major income is derived from wages, and they cultivate leased lands, The poor possessed 3-4 acres of their own lands; most of them lying in hillocks or unproductive in nature and very poor possessed 1-2 acres of land their major source of income being wages. Wage earning is considered as an indicator of poverty.

### **b) Livelihood Analysis**

For the purpose of livelihood analysis, one individual from each wealth category was selected for an in depth study of sources of income and expenditure which facilitated in understanding the standard of living and scope for choice of livelihood options.

### Rich farmer ( Crop+ Horticulture)

The rich farmer who raised crop and horticulture in his fields and owned 6.9 ha. of cultivated land in watershed, 4 ha. under hillock which is usually fallow and 1.6 ha. under irrigated. He did not possess any milch cattle. He had a loan worth Rs 30,000/- and his income and expenditure statement is presented in table-3.

**Table-3 income and expenditure statement of Rich farmer ( Crop+ horticulture)**

INCOME		EXPENDITURE	
Item	% of total income	Item	% of total Expenditure
Sale of vegetable	40	Agricultural input	45
Marketing of cereals	05	Clothes	10
Marketing of castor	05	Food	30
Sale of fruits ( Mango, Amla, Guava)	05	Social functions	5
Sheep	05	Medical treatment	5
Paddy	35	Education	5
Sale of paddy straw	05	<b>Total</b>	<b>100</b>
<b>Total</b>	<b>100</b>		

It is evident from Table 3 that the rich farmer growing cereals and horticulture crops derived a major share of income from agriculture viz 40 percent from sale of vegetables, 35 per cent from paddy, 5 per cent each from cereals, castor, fruits, sale of paddy straw sale and of sheep. Expenditure statement indicated that rich farmer channelised over 45 per cent of his income on agricultural inputs, 30 per cent on food, 10 per cent on clothes which were important items of expenditure while education, social functions and medical treatment each required 5 per cent of his total expenditure.

### Rich farmer ( Crop+ Business)

Another rich farmer involved in cultivation and business was studied to analyse his income and expenditure pattern. This farmer held 2.5 ha. land under irrigated, 4.5 ha. land under dryland and 4 ha. of land under hillock which he used for grazing and fuelwood purpose (PPR). He had an outstanding credit of Rs 30,000/- with a bank. Income and expenditure statement is presented in table-4.

**Table-4 Income and expenditure statement of Rich farmer ( Crop+ Business)**

INCOME		EXPENDITURE	
Item	% of total Expenditure	Item	% of total income
Paddy	30	Agriculture input	30
Milk	50	Permanent employee	12
Paddy straw	4	Clothes	08
Grazing land -PPR	01	Food	35
Castor	15	Social functions	05
<b>Total</b>	<b>100</b>	Medical treatment	05
		Education	04
		Extended family	01
		<b>Total</b>	<b>100</b>

From the above Table it could be inferred that the Rich farmer with crop and business earned over half of his income from sale of milk- (50%). Other sources of his income include sale of paddy (30%), castor (15%), sale of paddy straw (4%), and sale of tamarind, fuelwood and fodder and providing grazing facility in his PPR earned him a little cash. Expenditure statement indicated that he channelises 30% of his income for purchase of inputs 35% on food and clothes 8%. Besides this he spends 5 per cent each on medical treatment and social functions , 4 per cent towards education and 1 per cent on his extended family.

#### **Middle income level farmer**

In order to understand the income and expenditure behavior pattern of middle income level farmer a case of one farmer from the middle income wealth category was taken (Table-5) This particular farmer possessed 2 ha. of land under watershed and 2 ha. outside watershed. He had not repaid the loan amount of Rs 15,000/- to the bank. He, however, supplemented his income by toddy sale and plying an auto.

#### **Table-5 Income and expenditure statement of Middle income farmer**

Table -5 indicates that the middle income level farmer derived a major part of

income from sale of toddy - (40%) and plying auto (35%) , other sources of income include sale of paddy (15%) and castor (10%). Expenditure was more towards food (50%), followed by investment in agricultural inputs (20%), clothes (5%), medical treatment (5%), Education ( 4 % ) and maintenance of toddy tree (9%) and social functions (6 %) and rent for leased land acquired for grazing (1) %.

**Table-5 Income and expenditure statement of Middle income farmer**

INCOME		EXPENDITURE	
Item	% of total Expenditure	Item	% of total income
Sale of toddy	40	Food	50
Autorickshaw	35	Clothes	05
Sale of paddy	15	Agriculture input	20
Sale of castor	10	Medical treatment	05
<b>Total</b>	<b>100</b>	Social functions	06
		Education	04
		Care of toddy palms.	09
		Rent for leased grazing land.	01
		<b>Total</b>	<b>100</b>

### Poor farmer

Coping strategy of a Poor farmer was studied through the analysis of his income and expenditure behavior pattern. This category farmer with 2 ha. of land was studied for understanding his livelihood options.

**Table-6 Annual Income and expenditure statement of poor farmer**

Table -6 indicates that the poor farmer's major source of income was from Labour (70%) and from sale of toddy (28%). A meagre income was received from cultivation of castor ( 02%). His expenditure pattern indicated that he spent more towards food and household activities(49% & 30% respectively) rather than on education and agricultural inputs. He has been unable to repay bank loan worth Rs 10,000/- .

**Table-6 Annual Income and expenditure statement of poor farmer**

INCOME		EXPENDITURE	
Item	% of total Expenditure	Item	% of total income
Labour	70	Agriculture input	01
Cultivation of castor	02	Education	02
Selling of toddy	28	Clothes	06
<b>Total</b>	<b>100</b>	Medical treatment	02
		<b>Food</b>	<b>49</b>
		Household	30
		Functions	07
		Transport for toddy selling	03
		<b>Total</b>	<b>100</b>

**Very Poor farmer:**

A farmer from a Poor farmer wealth category was studied for income and expenditure behavior pattern. A farmer possessing 1ha. of land was studied for understanding his livelihood options.

**Table-7 Annual Income and expenditure statement of a Very Poor farmer**

INCOME		EXPENDITURE	
Item	% of total Expenditure	Item	% of total income
Selling of milk.	14	Agriculture input	05
Labour work	67	Clothes	08
Sale of paddy	19	Household	20
<b>Total</b>	<b>100</b>	Medical treatment	05
		Education	02
		Social functions	05
		Food	55
		<b>Total</b>	<b>100</b>

Table – 7 indicates that the very poor farmer derives a major part of his income from working as labour (67%) and from sale of Paddy (19%) followed by other activities viz., selling of milk (14%). Livestock especially (milch cattle) contribute significantly to the income. His expenditure is more



towards food (55%) and household activities(20%) rather than education and agricultural inputs. He was also unable to repay a bank loan worth Rs 18,000/- and Rs 900/- to the local money lender.

## Conclusion

To understand the socio economic status and means of livelihood of stakeholders, their categorization into wealth groups- rich, middle, poor, very poor; by their own criteria through wealth ranking and income and consumption patterns by livelihood analysis were found to be essential for participatory planning of micro watershed. Wealth has been primarily assumed by stakeholders as a steady flow of income either through ownership of large cultivable land or holding businesses and employment. Earning wages was found as low in status and an indicator of poverty. Analysis of livelihood pattern of all groups reveals the trend that the contribution of agriculture to total income increases with size of farm holding. 'Rich' spend more on social functions, clothing and education while expenditure on food decreases. This finding is in concurrence with Engel's law of consumption in economics. While planning for microwatershed, more focus needs to be given on enhancing productivity of farms of the poor and very poor through more profitable and effective technologies followed by middle and rich beneficiaries which would eventually contribute to equity, an important criteria of attaining sustainability of microwatershed .

## References

- Barbara Grandin 1988 Wealth ranking in Smallholder communities: a field manual, Intermediate Technology Publication .London.
- H P Singh and T K Bhati 1993 Integrated watershed development program Resource book for development of model watershed projects in DPAP and DDP areas of India occasional paper GOI Ministry of Rural development. Krishi Bhavan new Delhi
- Joachim Theis and Heather M Grady 1991 Participatory Rapid Appraisal for Community development .A training manual . IIED United Kingdom
- Meera Kaul Shah 1990 Gendered perceptions of well being and social change in Dhako Ghana (In) The myth of community: Gender issues in participatory development. Editors Irene Guijit, Meera kaul Shah Vistaar publications New Delhi p.142.
- Rajaratnam Jolly Ganeshan, Thasian, Helen, Babu, Navamoni, Abel Rajaratnam (1992) Validating wealth ranking of PRA and formal Survey in Identifying the rural poor. RUHSA Department, Christian Medical College and Hospital, RUHSA campus, 632 209, north Arcot Ambedkar d'strict, tamilnadu South India April, *In* Neela Mukherjee 1992 Participatory rural appraisal and questionnaire Survey, Concept Publishing Company New Delhi pp 61
- Velayutham M, Ramamurthy V and Venugopalan M V 2001 Agricultural Land Use planning from theoretical perspectives to participatory action plan in the Indian context. A base paper prepared for Mission mode project on land use planning. NBSSLUP, Nagpur.

WEALTH RANKING

NUMBER OF HOUSEHOLDS IN EACH OF PILES AS GIVEN BY THE THREE INFORMANTS

**I Name of the Key- Informant : Mr Bodampalli Narayana Reddy, Panchayat Karabor**

Pile-1 \_ Rich Category (Score- 25)

400,367,365,251,252,253,249,250,245,246,247,248,243,244,242,240,241,234,235,236, 239,231,233,210,211,132,127-131,119,120-124,115-119,110-114,62-63,9-10,115-119,16-17,4,40-41,42-43,14-15,38-39,18-19,3,2,11-13,37.

Pile-2 Middle Category ( Score-50)

399,398,387-388,376,353-356,348-351,340-343,335-338, 292-306,323-330,315-322,307-314,284-291,268-275,224,217,216,212,178 179,177,176,162,161,160,152-154,149-151,146-148,145,141-143,138-140,137,102-103,104,101,97-98,87-90,86,82,80-81,79,78,75-77,74,73,69,70-72,67-68,66,65,64,52,50-51,46-48,44-45,49,1.

Pile-3 Poor Category ( Score-75)

394,393,385-386,381,380,399,378,368,185-187,164,96,93,92,91,83,57-59,210-211,368

Pile- 4 Very poor category. ( Score-100)

396,395,377,366,362,361,360,359,334,333,332,331,227-229,213,208-209,206,205,204,203,202,199,200,201,197-198,196,195,194,193,192,190-191,189,188,184,183,182,181, 25,22,24,23,8,7,6,5.

Criteria expressed by the Key- Informant

I Landlords, land more than 10 acres Businessman, general stores,

II Livestock- Sheep, Goat, Land 5-10 Acres.

III Less than 3 acres, wage laboureres

IV Laboureres, less than 1 or 2 acres.



## **II Name of the Key – Informant-2 : Mr Narasimha Reddy VSS Member**

Pile-1 Rich Category ( Score-25)

399,398,387-388,376,62-63,101,146-148,87-90,86,132,127-131,126,125,120-124,115-119,110-114,50-51,46-48,44-45,49,254-257,251-253,249-250,245-248,243-244,240-241,242,234-235,236-239,231-233,210-211,367,284-291,217,214,178-179,177,353-356,348-351,344-347,340-343,335-338,323-330,400,315-322.

Pile-2 Middle ( Score-50)

141-143,138-140,137,102-103,104,152-154,145,164,379,380,82,79,78,75-77,74,73,69,70-72,67-68,66,65,64,42-43,52,1,57-59,268-275,212,40-41.

Pile-3 Poor ( Score-75)

331,227-229,9-10,16-17,332,366,361,360,359,334,333,161,149-151,93,96,185-187,378,393,368,394,80-81,83,91,92,14-15,292-306.

Pile-4 Very Poor ( Score-100)

2 1 3 , 2 0 7 , 2 0 8 - 2 0 9 , 2 0 5 , 2 0 4 , 2 0 3 , 2 0 2 , 2 0 0 , 2 0 1 , 1 9 7 - 198,196,195,194,183,182,181,25,22,188,184,193,192,190-191,189,377,1,18-19, 24,396,395,199,11-13,23,216,7,6,176,307-314.

Criteria for classification

I Rich- Employees, more land ( > 10 acres) , economically sound, staying outside, people give away land for lease.

II Middle- Economically sound, 5-10 acres., living on their own, without depending on others, cultivate own land plus the leased lands.

III Poor- Hard working people, <3-4 acres of land, cultivate land- leased-in.

IV Very poor- labourers , 1 acre of land.

## **III Name of the Key -- Informant-3 Mr Samad , Progressive farmer**

Pile-1 Rich Category ( Score-25)

177,178-179,370,110-114,115-119,120-124,125,126,127-131,132,242,

Pile-2 Middle ( Score-50)

40-41,,42-43,44-45,46-48,49,50-51,57-59,62-63,64,65,66,67-68,70-72,73,74,75-77,78,79,80-81,82,83,86,87-90,91,92,93,96,101,102-103,104,137,146-148,149-151,152-154,160,162,176,212,214,215,216,217,231-233,234-235,236-239,240-241, 243-244,245-248,249-250,251-253,254-257,348-351,353-356,365,367,368,376,387-388,394,398,399,400.

Pile-3 Poor ( Score-75)

9-10,11-13,14-15,16-17,18-19,138-140, 141-143, , 145, 161, 164, 185-187, 210-211, 224, 227- 229, 307-314, 315-322,323-330, 331, 332, 333, 334, 335-338, 340-343, 344-347, 359, 360, 361, 366, 378, 379,, 380, 381, 385-386, 393.

Pile-4 Very poor ( Score-100)

396, 395, 213, 208-209, 207, 206, 205, 204, 203, 202, 200, 199, 197-198, 196, 195, 194, 193, 192, 190-191, 183, 182, 181.

### **Criteria for classification**

I Rich- Having business, cultivating own land (> 10 acres) , economically sound, staying outside, people give away land for lease.

II Middle- 5-10 acres., living on their own, Independent nature, cultivate own lands plus the leased lands.

III Poor- Hard working people, <3-4 acres of land, cultivate leased-in lands.

IV Very poor- Labourers , 1 acre of land.



## ANNEXURE-II

### Wealth Ranking scores of beneficiaries in Micro Watershed

Household Position	Household No.	Informant Ranking Score			Av Score
		INF2	INF1	INF3	
1	2	25	25	25	25
2.	3	25	25	25	25
3	4	25	25	25	25
4	38-39	25	25	25	25
5	62-63	25	25	25	25
6	110-114	25	25	25	25
7	115-119	25	25	25	25
8	120-124	25	25	25	25
9	125	25	25	25	25
10	126	25	25	25	25
11	127-131	25	25	25	25
12	132	25	25	25	25
13	242	25	25	25	25
14	370	25	25	25	25
15	177	50	25	25	33
16	178-179	50	25	25	33
17	231-233	25	25	50	33
18	234-235	25	25	50	33
19	236-239	25	25	50	33
20	240-241	25	25	50	33
21	243-244	25	25	50	33
22	245-248	25	25	50	33
23	249-250	25	25	50	33
24	251-253	25	25	50	33
25	367	25	25	50	33
26	400	25	25	50	33
27	254-257	-	25	50	37
28	365	25	-	50	37
29	40-41	25	50	50	41
30	42-43	25	50	50	41
31	44-45	25	25	50	41
32	46-48	25	25	50	41
33	49	25	25	50	41
34	50-51	25	25	50	41

35	86	50	25	50	41
36	87-90	50	25	50	41
37	101	50	25	50	41
38	146-148	50	25	50	41
39	210-211	25	25	75	41
40	214	50	25	50	41
41	217	50	25	50	41
42	224	50	-	75	41
43	353-356	50	25	50	41
44	348-351	50	25	50	41
45	376	50	25	50	41
46	384	50	25	50	41
47	387-388	50	25	50	41
48	398	50	25	50	41
49	399	50	25	-	41
50	1	50	50	-	50
51	52	50	50	50	50
52	64	50	50	50	50
53	65	50	50	50	50
54	66	50	50	50	50
55	67-68	50	50	50	50
56	69	50	50	50	50
57	70-72	50	50	50	50
58	73	50	50	50	50
59	74	50	50	50	50
60	75-77	50	50	50	50
61	78	50	50	50	50
62	79	50	50	50	50
63	82	50	50	50	50
64	102-103	50	50	50	50
65	104	50	50	50	50
66	137	50	50	50	50
67	152-154	50	50	50	50
68	160	50	-	50	50
69	162	50	-	50	50
70	212	50	50	50	50
71	284-291	50	25	75	50
72	315-322	50	25	75	50
73	323-330	50	25	75	50
74	335-338	50	25	75	50
75	340-343	50	25	75	50



76	344-347	50	25	75	50
77	9-10	25	75	75	58
78	14-15	25	75	75	58
79	16-17	25	75	75	58
80	57-59	75	50	50	58
81	80-81	50	75	50	58
82	138-140	50	75	75	58
83	141-143	50	50	75	58
84	145	50	50	75	58
85	149-151	50	75	50	58
86	268-275	50	50	75	58
87	11-13	25	100	75	66
88	18-19	25	100	75	66
89	83	75	75	50	66
90	91	75	75	50	66
91	92	75	75	50	66
92	93	75	75	50	66
93	96	75	75	50	66
94	161	50	75	75	66
95	164	75	50	75	66
96	176	50	100	50	66
97	216	50	100	50	66
98	292- 306	50	75	75	66
99	368	75	75	50	66
100	379	75	50	75	66
101	380	75	50	75	66
102	394	75	75	50	66
103	185-187	75	75	75	75
104	307-314	50	100	75	75
105	378	75	75	75	75
106	381	75	-	75	75
107	385-386	75	-	75	75
108	227-229	100	75	75	83
109	331	100	75	75	83
110	332	100	75	75	83
111	333	100	75	75	83
112	334	100	75	75	83
113	359	100	75	75	83
114	360	100	75	75	83
115	361	100	75	75	83
116	366	100	75	75	83

117	201	100	100	75	91
118	377	100	100	75	91
119	5	100	-	100	100
120	6	100	100	100	100
121	7	100	100	100	100
122	8	100	-	100	100
123	22	100	100	100	100
124	23	100	100	100	100
125	24	100	100	100	100
126	25	100	100	100	100
127	181	100	100	100	100
128	182	100	100	100	100
129	183	100	100	100	100
130	184	100	100	100	100
131	188	100	100	-	100
132	189	100	100	100	100
133	190-191	100	100	100	100
134	192	100	100	100	100
135	193	100	100	100	100
136	194	100	100	100	100
137	195	100	100	100	100
138	196	100	100	100	100
139	197-198	100	100	100	100
140	199	100	100	100	100
141	200	100	100	100	100
142	202	100	100	100	100
143	203	100	100	100	100
144	204	100	100	100	100
145	205	100	100	100	100
146	206	100	-	100	100
147	207	-	100	100	100
148	208-209	100	100	100	100
149	213	100	100	100	100
150	393	75	100	75	100
151	395	100	100	100	100
152	396	100	100	100	100