

adjusted delivery ratio. The sum of the product thus obtained was divided by total area of the subwatershed and converted into percent value to obtain "silt yield index". The details of the calculations for each subwatershed are given in Appendix-3.

#### Priority fixation :-

In Appendix-4, the subwatersheds have been graded in descending order of priority using "Silt load index". Higher values of "Silt load index" suggest higher priority and vice versa. Subwatersheds have been grouped into five categories to indicate their priorities as given below:-

#### Categorization of sub watersheds in order to priorities for Soil Conservation measures in the Pandoh Dam catchment

Priority category	Sediment yield index range	No. of sub-watersheds	Area in ha.	% of the total
1. Very high	1250 and above	81	170620	39.92
2. High	1150-1249	70	126536	29.61
3. Medium	1050-1149	54	101020	23.64
4. Low	950-1049	15	24624	5.76
5. Very low	Below 950	2	4560	1.07
Total:		222	42,7360	100.00

(+ snow covered areas of 72176 ha.)

It is seen from the above table that the catchment area of 427360 ha. excluding inaccessible and snow covered areas of in the north comprising 721,76 ha. has been divided into 222 subwatersheds. Out of these 81 subwatersheds covering an area of 170620 ha. (39.92%) fall under <sup>very high</sup> priority category and 70 sub-watersheds with an area of 126536 ha. (29.61%) fall under high priority category. These very high category watersheds are needed to be treated on priority basis to effect significant reduction in the siltation.

For the purpose of conservation measures in the catchment, these watersheds may be selected in the first instance. The priority grading number of the subwatersheds does not necessarily mean that the detailed soil survey and soil conservation works should also follow strictly the same order. These are primarily meant to show the relative severity of the problem in the different subwatersheds. Keeping in view any local conditions and conveniences, any watershed within very high priority category could be selected for implementing soil conservation works.

A statement (appendix 5) showing distribution of different erosion intensity mapping units in each subcatchment has been given to provide an idea of the broad characteristics of the subcatchments. Such an information would prove useful in preparing master plans on subcatchment basis at later stages.

In appendix-6, subwatersheds, etc. are given. This table helps to identify, to some extent, the priority subcatchments also.

PART B Remaining Area of Pong Dam (not given in the report No. AGRIL403)

(Area above Pong Dam)

This portion of the report deals with the catchment area above Pong dam, which had not been surveyed and reported in first report on "Demarcations of priority subwatersheds in the catchment of Beas river valley project" issued in May 1976 (Report No. Agri. 403)

This portion of the catchment extends over an area of 0.91 lakh ha (area calculated on the map). The area lies between 31° 0' to 32° 20' N.L. and 76° 45' to 77° 15' E.L. It forms uppermost part of the Pong dam catchment lying just downstream of the Pandoh dam. (Fig. 1)

Methodology is same as discussed in part 'A' of this report.

Priority fixation

As shown in the appendix 8 the sub-watersheds have been graded in order of priority using "silt load index". The priority fixation was done with respect to Pong Dam reservoir and to fill in the priority fixation made in the report No. 403-AGRI sub-watersheds have been grouped into five categories to indicate their priorities as given below:

Categorization of sub-watersheds in Pong Dam Catchment in order of priorities for Soil Conservation measures.

Priority category	Silt load index range	No. of sub-watersheds	Area in ha.	% of the total area
1. Very high	1250 & above	Nil	Nil	Nil
2. High	1150-1249	Nil	Nil	Nil
3. Medium	1050-1149	4	4140	4.52
4. Low	950-1049	9	16452	17.97
5. Very low	below 950	46	70964	77.51
<b>TOTAL :</b>		<b>59</b>	<b>91556</b>	<b>100.00</b>

It is seen from the above table that the catchment area of 0.91 lakh ha. has been divided into 59 subwatersheds. Out of these 4 sub-watersheds covering 4140 ha. (4.52% of the total area) fall under medium category whereas remaining 55 sub-watersheds covering an area of 87,416 ha. (95.48% of the total area) fall under low and very low category.

With the completion of priority delineation for the whole of the Pong dam catchment upto Pandoh dam, the final position regarding the categorization of subwatersheds into five priority categories is indicated in the table given below (combined findings of the present report and the earlier report no. AGRIL403)

Categorization of Subwatersheds in whole of Pongdam  
Catchment into priority categories

(Report No. 403 + Part B of Rep  
No. 455)

Priority Category	Silt load index range	No. of sub-watersheds	Area in hectares	Percentage
Very High	Above 1250	47	52306	8.1
High	1150-1249	85	102901	16.1
Medium	1050-1149	183	198518	30.9
Low	950-1049	124	142386	22.2
Very low	Below 950	114	145081	22.7
<b>Total:</b>		<b>553</b>	<b>641192</b>	<b>100.0</b>

PANDA = 427360 - Pando Da  
 PARTS = 91556 - Pong Da  
 Total = 518916  
 Misc = 72176 - Glorion  
 Grand Total = 591092 & Total