CHAPTER-4

4.0 Conclusion(s), Suggestion(s) and Recommendation(s)

The present chapter has been devoted to make the conclusion(s), suggestions(s) & recommendation(s) of the present study arrived at on the basis of information given in earlier chapter. These conclusions have been based on the basis of observation and interpretation of the data collected.

No doubt, there are policies in place with mechanisms yet the socio-economic conditions remain a matter of concern. In our research, the results of the analysis and the respondents reactions towards the implementation of the R&R plans and the programmes need further more deliberations and due diligence, if policy is to be evolved / improved so that the existing problems faced by the PAFs are attended to. There are volumes of papers than the real implementation for benefit of the PAFs.

The major problem is that most in-depth studies are at micro level and it is difficult to combine them together to formulate macro level policies. There is an urgent need to conduct macro level studies which essentially will yield explanation to ‘what’ and will suggest on the ways on ‘how’ apart from analysis of ‘why’. Since our present study focuses only on four projects, hence, can be considered as ‘micro level study’ but we have tried to study hydropower projects under different controls hence, surely the results shall be of use to improve present state of affairs and will definitely serve as input to any policy level change or implementation mechanism.
Conclusions of the Study for the Kol Dam hydropower project

1. The Kol dam hydro power project is situated on the boundaries of four districts of Himachal Pradesh i.e. Distt. Bilaspur, Shimla, Mandi and Solan. The diversion on the right on the Dehar bridge leads to the project site. The nearest project affected area is Harnoda at around 3 kms form the diversion on the National Highway 21. The project is still under construction stage and the expected year of commissioning of the project is 2012. The R&R policy of NTPC (hosted on web site) is of 2005 which has been aligned with the National R&R Policy, 2003 and Kol Dam have been listed on web site which have been provided benefits of R&R under this policy whereas the compensation have been paid out prior to 2005.

2. The general feeling of the respondents is noted here which concludes that their earlier life was socially better than now. The effect on the culture as well on the social life is termed as negative only. Though there is a non-significant bit of contradiction on the aspect of economic impact too as majority of the respondents termed the effect as negative only.

3. No PAF have been allotted agricultural land in lieu of agricultural land. All the respondents termed the cash compensation as less paid (for a Rs. 1/- paid to them they expect that the compensation should have been between Rs 1.50/- to Rs. 3.00/) and they are suspicious over the formula used to carry out assessment of land (esp.
agricultural land) till date which signifies the lack of trust in authorities and failure of authorities in explaining the same to them e.g. for an agriculture land at Harnoda village the compensation paid is around 3.5 Lakh per bigha whereas the land was used for harvesting four seasonal crops per annum. There are comparisons with up-coming cement plants or hydropower projects where the compensation is almost at 15 Lakh per Bigha level or where even for letting go a High Tension wire above the agriculture land have been compensated for around Rs. 10,000 per bighas.

4. PAF has to buy LPG, fodder for their cattle (where PAF is still rearing cattle) and have limited supply of drinking water (keep apart the requirement if rearing of cattle d done). Each PAF will have to buy water from IPH scheme once the scheme for the drinking water is made available. They earlier had cattle providing income and catering domestic use too whereas now they have to purchase even the milk and have no access to the forest land hence, the overall impact has been termed as negative only. A few PAF have termed the economic impact as marginal towards positive side.

5. There are instances that a PAF is living at other place than that acquired by for the project and it has been mentioned specifically that due to their name being in the election list indicating other panchayat at their place of residence and whereas their combined property was being acquired by the authorities at other place hence, for reasons that their name is not in the PFR (panchayat family register), they were not awarded compensation. Also, there is feedback on
discriminatory assessment of compensation in Kasol and Chamyoun village regarding agriculture land in specific.

6. All the PAFs have been provided a plot of size 40*50 m i.e. 200m² and cash in lieu of the land of any type / house and other property acquired. All the plots are adjoining each other in a row and have been made in steps on the hill with retaining walls in the back to make way for the new plot on the uphill side. Hence, in any plot, all three sides except the entrance side (towards the road) are closed and there can be no provision of the windows on any of the all three sides. There is no setback area in any plot though earlier it was promised that each plot will have at least 5 feet set back and at places, the plots seem to be carved out by filling a stone masonry wall chamber of 200m² area. How the constructed houses are going to get clearance from the authorities remains to be seen. AS pointed out earlier also, if the set backs were to be made by the PAFs, they are not aware of that and such they have constructed on the plot area as plinth area which, in case is true, shows disturbing sign of lack of dialogue prevalent between the authorities and the PAFs.

7. There are instances where one cannot raise second storey on his house since the LT supply lines are running over the plot in such fashion that it won’t be possible to raise the structure.
8. It may be noted that in every row of the plots, no turning space or parking space for vehicles has been provided except for few exceptions.

9. There is an issue of street lighting in the resettlement areas at various places. All the respondents have made the houses themselves. It was promised that the construction material will be transported to their construction sites free of cost yet in many cases where the house construction site was away from the nearest road, the material was unloaded on the road only. Labor charges for manual transportation were to be born by the PAFs.

10. The road leading to Kasol village via Chamyoun village, from harnoda, jamthal village, is not in use for last 3 years due a slippage caused by construction / excavation activity and the same has not been attended to, till date. The normal transportation time has increased and at present the access has been made available through the dam construction site only. Same is true for the road leading to kenchi mod (Barmana) from Jamthal village and is not in use now.

11. Maximum project affected families have shifted to new resettlement colonies now for about last 5-6 years and are still facing drinking water problem. The NTPC management is supplying the same through water carrier tankers free of cost but the same is not of potable quality, as has been observed by us also. There was no feedback on whether the potablity of water is tested or was promised to be tested before supplying the same though the feedback from the
PAF's clearly points out that the water is not potable at all. The NTPC authorities have channeled around Rs.6 Crore to the IPH (Irrigation & Public Heath Department), H.P. for a water lift scheme but the same is still not executed and is still pending for around two years now.

12. All of the respondents are of the view that since they had common water resources in their villages hence, the water should be supplied free of cost and the project affected people should be given preference on the connections and supply of the water and only the unutilized portion / capacity of the water scheme should be made available to the neighboring villages. In some areas there is a IPH connection (resettlement areas towards Kasol) but the regularity of supply is poor than earlier time as due to construction activities there are many times breakage of pipe lines which require time for repair, more than usual.

13. There have been only one instance where a member of PAF have been provided employment in the NTPC otherwise all the other employment is through local contractors (working as sub-contractor in the main, allied or services works of the project) for which the term 'opportunity employment' is well suited.

14. All respondents are of the view that this type of employment is going to diminish once the project is made operational. The respondents want 70% reservation in jobs for the PAFs but not through contractors. For them the job means a permanent job to a family member for their family
sustenance. The agriculturalists, who have lost their land are now job less for years now.

15. Many respondents want the authorities to make provision of a lump-sum amount of (around 5-10 Lakh) for each local PAF member who have been rendered unemployed due to this project since, their skills are of no use in the project itself. Respondents have called for awarding priority in petty contracts and allied services (taxi, bus etc.) to the PAFs.

16. Respondents want their children be provided with technical training through provision of NTPC training center in the area. Further, if any child goes in for higher education, the cost of the education should be born by the NTPC.

17. There is no counseling provided by the NTPC to the local youth regarding the career, education, entrepreneurship etc. There are instances where a local PAF member has worked under the contractor and have not been issued experience certificate. Those employed through contractors do not know about ESI scheme and many members of PAFs have been working in shifts of 12 hours and are not paid overtime.

18. There is also an issue of the PAF certification since the same is issued in the name of the karta of the family (nuclear as well as the HUF) and for employment the young wards need to produce the PAF certificate where usually it is not in their name and hence, create unnecessary nuisance.

19. Maximum number of respondents from the PAFs have stopped rearing cattle (ox, cow, buffalo, goat etc.) since in the
plot of size 200 m\(^2\) it is not practicable to house them. Further, all those who are still rearing cattle, have reduced them in number significantly since, fodder have to be purchased now and earlier it was available in the grazing land (*ghasni*) in and around their villages and since, they themselves are getting drinking water through tankers how can they make the maray go round. There is also a demand for cow sheds which needs no explanation keeping in the mind the size of the plot made available in lieu of the land / house etc. acquired.

20. The hospital is charging an amount of Rs. 15/- for registration of patients in OPD and other services are charged as per normal practice. Respondents are of the view that the medical facilities should be made available free of cost to the PAFs.

21. In some instances it has been found that the service line of electricity from nearest pole in running as long as 200 mtrs. or so. During the time of high winds and torrential rains the same leads to troubles and due to sparking many respondents, facing this peculiar problem, have born the expenses of losses of their electrical and electronic valuables.

22. The affected areas, near the main project areas, have problems related to blasting made by the NTPC. Many respondents have shown their houses, which they have newly built from the compensation amount received, having wide cracks. Not all cases reported by the affected people have been surveyed. Initial assessment of damages have
been made by NTPC but that of limited number of affected people (that too only project affected people and not all who have been facing problems with the housing or other structures losses, due to blasting). For the surveyed cases too, compensation have been determined (as gathered) but till date no compensation amount has been paid to anyone.

23. There is no community center (Janj Ghar) provided except at Harnoda village and Chamyoun colony. The PAFs demand the same in every resettlement colonies since, the design of resettlement colonies is not capable to provide space to host such type of community functions which require space for ceremonies and hence, it clearly shows that the design of resettlement colonies is not based on local people participation.

24. There is no public toilet facility in new resettlement colonies. There is no cremation ground and no space or pondage of water for conducting rituals after death.

25. There are no recreational facilities for the children. The existing school has been made anew by NTPC. The respondents are of the view that in DAV school, opened by NTPC, their wards should be provided the quality education, on offer, at cheaper price. At present, there is no fee discrimination amongst the wards of NTPC employees, local habitants and PAFs. Further, it has been gathered that respondents want the education to female free of cost. There are no parks / playgrounds for the children.
26. There is no provision of manpower for garbage collection and disposal. It has been mentioned that earlier it was a panchayat level decision for the disposal of the garbage at village level and now since, it is a colony culture there is need of employed manpower to carry out the same. Same is the problem related to maintenance of the sewerage and drainage system. The drainage system is not seen at many places at all.

27. There is no awareness on the treatment of common resources of their village at the time of acquisition and hence a common feeling of distrust amongst the PAF regarding the compensation and distribution of the same amongst them.

28. The respondents want forestation in and around the resettlement area which is non-existent at present and the environment, in general, have been termed as dusty and unhealthy compared to earlier time.

29. All the general well being facilities provided in NTPC colony at village Jamthal is referred to as base line by the respondents which should be kept in mind while developing facilities policies for them.

30. No self-help group or an NGO ever contacted respondents to help them build awareness about their rights as PAFs. The policies at Central level and State level are not known amongst them.
Conclusions of the Study for the Larji hydropower project

1. The project has been commissioned in the year 2006. There was no R&R policy in former HPSEB when displacement happened due to acquisition of the assets of the people. Even till date, there is no such policy hosted on the web site of HPSEB Ltd.

2. The overall impact of the project has been termed as negative in social as well as economic aspect.

3. No job has been provided to any member of the sampled PAFs in the project. There was employment in a few cases during the construction stage but through major /local / petty contractors or sub-contractors only.

4. The basic principle followed to acquire land was cash paid in lieu of any type of land or house of any other property or compensation paid to local artisans (even if tenant) against the assessed business worth. Respondents resent that there is no reason to admit that after acquisition of their assets, the project authorities wore any responsibility towards the PAFs, at least, leave apart the project affected area.

5. Most of the families displaced, now have no means for their sustenance except petty works as per availability.

6. Respondents require a proper supply of drinking water.

7. Respondents stress that the compensation paid was minimal and no one (NGO, self-help group or the authorities)
appraised them about their rights, while the acquisition was made. The compensation paid is based on the classification of land (agricultural, non-agricultural etc.) whereas the land they had to purchase for resettlement, later on, was available on commercial rates only.

8. The award of compensation had been discriminatory, in terms of respondents. As appraised by them, the rate of agricultural land acquisition in area like Thalout village was around Rs. 15,000/- per bigha whereas the agricultural land at places like shara nallah, dwada, larji was assessed at around Rs. 95,000/- per bigha. After ten years respondents still question such discriminatory methods of assessment which points on the failure of the authorities to involve PAFs in such exercise. At present around 8 cases are in Court of Law mainly on account of compensation amount being on lower side.

9. There is no awareness about the treatment of the common resources and hence, lack of trust amongst the PAFs. Some respondents, seemingly informed and educated, claim that the common resources (mustarka khata) have not been compensated at all.

10. There is no provision of the recreational facilities for the PAFs and their wards. Further, there is no provision made, till date, for community centers or common places. The roads leading to the PAFs near Sarha Nallah is kuchha till some distance and does not lead at all to the village site.
Same is true for other villages / areas like places nearby thalout, on road leading to panarsa, takoli etc.

11. There project related activity has depleted the local natural resources. All the important and reliable water resources have dried up all along the project. Same is true for the area affected due to the Larji tunnel construction on the National highway leading to the Manali via Kullu, both well known tourist places.

12. There had been no compensation to families (including PAFs) whose houses or other private property(ies) were reported to have suffered losses (cracks etc.) in and around the project area due to blasting, till date. There was no line of communication provided to the PAFs or the families affected due to blasting as HPSEB asked them to raise the issue to the contractor and the contractor in turn responded vice-versa.

13. There is no or literally marginal cattle rearing than earlier since drying of natural resources not only increased pressure on water resources but also scarcity of fodder for cattle is prevalent in the area, which is bought now by those who still rear a marginal number of cattle for the domestic use of their produce. The issue of road access is prominent in this issue too, since the nearest road in most of villages is around 1.5 to 2 km away and carriage of fodder becomes an issue.

14. The use of LPG finds increased usage since the access to forest is marginal and the change is associated with economic dimensions.
15. There is also an issue on the utilization of the land acquired by the project authorities. Cases exist along the village thalout and Aut and respondents question the very acquisition in the name of development. It has been gathered that the land was not used after the construction stage of the project and there are incidents when the PAF who have been awarded compensation for houses have shifted back to their houses since no physical acquisition was ever made by the project authorities.

16. Local artisans e.g. for Kullu shawl have stopped their profession, in cases, for around 10-13 years, and are now operating shops. Their workers (karigars) have shifted from that place. Though they have been paid compensation for their business worth, evaluated at the time of acquisition, but in that amount the same area (minimum area required to carry out such business) cannot be bought or cannot be hired on the same rate, as the same is available on commercial rates, generally on higher side.

17. The respondents are of the view that there is no LADC acting in their area since, they have never heard about it.

18. There was concern of the respondents about the applicability of the free 100 units of electricity to be supplied by the project authorities free of cost till ten years from the date of commissioning of the project, about which they have become aware through news paper. As on date, no one gets the same.
19. The policies at Central level and State level are not known amongst them.

Conclusions of the Study for the Malana-I hydropower project

1. There was no R&R policy at the time of acquisitions. The project is running since the year 2000. All the land acquisitions were made by the year ending 1998.

2. Under private sector, this project was the first to be executed in the State of H.P.

3. The impact on the social set up and related dimensions as been termed as negative.

4. The economic aspect has been termed as positive, by majority of respondents, at Jari and by some in Chowki since many have got job in the MPCL and others have chances to earn more since the MPCL colony and other outsiders have populated Jari, the roads are better now, due to projects coming up in the area (except at some stretches) and being an intermediate stoppage for tourists/pilgrims willing to go on pilgrimage to Mani Karan. Chowki village is an indirect beneficiary of Malana-II hydropower project since they have made Chowki village as family station for their employees apart from bagheyanda (some one km before Jari). Overall economic effect has been gauged by the respondents as average to good and hence, positive in any sense.
5. There is general feeling amongst the PAFs that they were not aware about the process of project and land acquisition at all but many are contended with the compensation paid at that time. The reason can be attributed to the fact that mostly; only land has been acquired implying literally no rehabilitation or resettlement problem. The head race tunnel runs underground from a reservoir at a place at the foothill of the mountain where Malana village is situated. There is only one PAF at the reservoir site, affected due to land acquisition only, and rest is the Government land. The area is very less habitated. Further, the land owned per family, even after acquisition, is enough for their sustenance.

6. All the land acquisition was made in 1998 and the compensation made was in the tune of Rs. 1.5 Lakh per bigha for agricultural land, mainly in two villages namely Jari and Chowki.

7. There are about 20 people employed in the MPCL itself from PAFs as per their qualification and many more (around 25) through contractors for support services in the hydropower plant and offices itself. Some have been employed in the Malana-II hydropower project, which is being executed by another developer.

8. Provision of street light is not termed as good in Jari / chowki by the respondents.

9. There is a problem of garbage disposal which has cropped up during last 12-13 years since the population, specially at Jari, has gone up due to influx of people.
10. Road are now wider than earlier, but are not maintained properly, as was appraised by respondents without making any reference of the authority responsible for the same which signifies the lack of awareness amongst the respondents about the administrative set up at Governmental level, even today.

11. There was concern in the PAFs at Jari about the land use since land acquisition was made in the name of the hydropower project and later on, as on date, they have been given to HPSEB for office use or for police chowki or for a school (free of cost and project authorities built the infrastructure for the same). Though, the facility of education and that of transportation for children has been praised a lot.

12. The issue of fodder is prominent and many have stopped rearing cattle since the grazing land (ghasni) availability has decreased significantly.

13. The developers have not made any provision of recreational facilities but are generous enough to provide funds for the same, as and when approached.

14. No self-help group or an NGO ever contacted respondents to help them build awareness about their rights as PAFs. The policies at Central level and State level are not known amongst them.
Conclusions of the Study for the Malana-II hydropower project

The project is under construction at present and the boundary of the project just touches the reservoir of the Malana-I project. The dam site is around 8 Kms from the sub-station site.

1. There is no company's own R&R policy.

2. The Malana village is the oldest democracy and is situated in far flung area. Earlier the track route was from jari village from where the habitants of the malana village used to buy their items of need. Now, the on foot distance is about an hour from the dam site of this project.

3. Since the social set up is very peculiar hence any change is resisted. Overall the impact can be termed as socially mild in positive sense since all the land acquired is about an hour distance on foot from the main village towards the bottom of the hill i.e. towards the Malana-II project and any interaction of the project authorities with local habitants is for creating awareness about the changed world.

4. The economic impact is negligent since prime factor is illiteracy which is prevalent and hence employability is impossible. There is no inclination for support services since all are self-reliant and are involved in local works. The economic system in place is self supportive and mutual benefit is the bottom line. For years to come when education makes way in the village at larger scale, an upsurge of educated youth in number will definitely bring a positive
change in terms of economic impact, as is perceived by informed local habitants and the project authorities.

5. There is no issue of compensation amount sufficiency since every PAF have surrendered a very marginal piece of land, which was not habitated, and in cases was not even in use and each of the family land is situated far away from village. Since there is no resettlement and rehabilitation issue hence, many issues designed in questionnaire are not relevant here.

6. There is no use of LPG even now. A survey has been conducted which depicts that a 2 km road will connect the village with the dam site area and hence, with the rest of the world. Nearest LPG agency is at Bhuntar (on national Highway just around 10 kms before Kullu) and the nearest LPG depot is at Jari.

7. The project authorities are interacting with the local people on regular basis and trying to create a conducive environment. On 5th April, 2010 the world environment day was also celebrated with the villagers and books were distributed amongst the children. A one time grant of around 63 Lakhs have also been given for local school and hospital. Before the project there was no medical facility available in the village. Respondents said that soon there will be a hospital with bed facility whereas at present only OPD services have been made available.

8. No self-help group or an NGO ever contacted respondents to help them build awareness about their rights as PAFs. The
policies at Central level and State level are not known amongst them.

Recommendations / suggestions of the study:

1. With due reference to the National Water Policy, 2005, planning development and management of water resources need to be governed by National perspective and water allocation priority should broadly be in the order of drinking water, irrigation, hydropower, ecology, agro industries and non agriculture industries, navigation and other uses.

2. Alternative site plans which require least rehabilitation issues and to the possible minimum agriculture land acquisition should be explored at the project authorities level and insisted at the Government / approval agencies level. In fact, all the sites identified by the authorities or the entrepreneurs should be accompanied with alternative site plans.

3. The dissatisfaction on the amount of compensation paid, in case of all the four projects under study, is primarily due to the non-transparency of the evaluation of the assets at the time of acquisition or the failure to convey the transparency adhered. The reason can also be found in the seemingly high land acquisition costs paid out at present as compared to earlier times. A closer examination reveals that had the respondents been provided with the avenues of sustenance than cash compensation only, at the time of acquisition of assets, the response could have been skewed towards satisfaction level. There is clear need to identify the
aspirations of the project affected people regarding the means for economic sustenance by using their skills.

4. Any category-I hydropower developer should not be allocated hydropower project in the State unless there is an R&R policy of the developer organization in place, which at the minimum offer package at par with National R&R policy, H.P. Hydropower policy and the provisions made under the National Tariff Policy. For category –II hydropower projects, the organizational R&R policy must be scrutinized for above stated conditions and ranking be accorded in the selection of the hydropower developer which shall be duly weighted for final ranking of all the bidders of the hydropower project meaning thereby that the bid of the bidder with lesser R&R benefits should be loaded with the cost of the additional R&R benefits on offer from other bidder.

5. It should be communicated to all the educational / vocational and other institutes and publicized enough that all the educated and skilled persons (from PAFs followed by Bonafied Himachalis) with employable skills shall be treated on priority in any recruitment drive (for non-executive cadre and skilled and un-skilled category) in any hydropower project, if their name is in the live register of the local or any employment exchange in the State including the Central Employment Cell at Shimla or even outside the State (but are Bonafied Himachalis).

6. It has been observed that many PAFs are not registered with the employment exchanges. It should be surveyed that out of
all the recruitments made after the H.P. Hydro Power Policy 2006 came into being, how may recruitments have been made from outside the State (since the policy depicts the right of the oustees as the first one followed by the Bonafied Himachalis) and in such cases, how many times the non-availability certificates have been obtained from the Labour Commissioner/Director Employment, Himachal Pradesh.

7. One member of each displaced families or adversely affected family, as a result of acquisition of the land for the project, is to be provided employment during the construction of the project, as per the State Hydro Power Policy and since the policy have been implemented retrospectively too, hence, the provisions are required to be implemented in the under construction projects e.g. in Malana-II and Kol Dam.

8. Any R&R cost should not be counted as project cost for treatment as a pass through in Tariff unless and until all the grievances are handled to the satisfaction of the aggrieved PAFs or people adversely affected due to project activities e.g. due to blasting etc. Hence, a follow up SIA study is need of the hour for any project. Moreover, the cost of the approved R&R plan of the project shall have to be in conformity with resolution of MOP,\(^1\) GOI whereby the R&R plan cost qualifies as project cost when it is in conformity with the National R&R Policy in force and also in conformity with the R&R package enclosed as Appendix to the Resolution whereby it has been stated that the provisions are applicable even if one family is affected. The package recognizes the rights of the

\(^{1}\) Amendment to National Tariff Policy, Dated 31\(^{st}\) March, 2008
'squatters' means the family occupying Government Land in the affected zone without a legal title, at least 5 years prior to the date of notification under section - 4 of Land Acquisition Act. The aim of the developer must be to allot built up houses and wherever, PAF opts for self construction, liberal House Construction Allowance has to be provided. At least six months prior the commencement of construction special training programmes from the ITI's would have to be undertaken by the developers. Further, there are provisions like scholarships, extension of medical benefits, marriage grants, subsistence grants, support for income generation schemes for cooperative and self help groups, seed; pesticide and fertilizer subsidies, and irrigation support. Only after thorough assessment of the sincerity with which the developer has applied the basic minimum various R&R policy provisions and assessment of the tangible benefit of the same, the cost of R&R Plan should be made a part of project cost and hence, a pass through in tariff later on. Needless to point out again the necessity to conduct independent SIA again along with the verification of implementation of various policy provisions.

9. Since, land is scarce and precious, there has to be a policy and mechanism put in place so that it can be ensured that all the land acquired for the purpose of the project establishment is used and is not transferred or used for any other purpose (except for a public purpose with prior approval of the appropriate Government) or does not remain unutilized otherwise the same should be compulsorily reverted to the possession and ownership of the appropriate
Government without payment of any compensation or remuneration to the project authorities. The related provision in the NRRP 07 needs a slight amendment to the effect that the cost of such unutilized acquisitions or acquisitions used for other purpose than approved ones shall not be counted as a part of project cost and hence, won't be a pass through in tariff. All such unutilized land acquired for the establishment of the project should be identified (as has been gathered during survey at Larji hydro power project that a lot of land is not utilized after construction stage or as in case of Malana-I it should be checked whether the necessary approval was acquired when the land acquired had been used for HPSEB office or a school or police chowki) & the same must be made in possession of the State Government.

10. Appointment of R&R Ombudsman should be made apart form publicizing the grievance redressal mechanism amongst the PAFs.

11. In the resettlement areas the responsibility of the developer should not be limited to the funding or providing one time fund for the basic amenities like drinking water, sanitation, drainage etc. but the developer should provide the basic amenities and maintain them on his own. Funding other agencies for making basic amenities available creates problem of co-ordination and usually ball is in his court approach to shift responsibility center which ultimately punishes the PAFs and no body else e.g in case of Kol Dam,
the drinking water scheme is still pending with IPH department.

12. It has been observed that there is very low awareness amongst the PAFs regarding their rights and the policies of Central and State Government regarding resettlement and rehabilitation of PAFs. It is required that the Governmental authorities or the project authorities should make available the copies of the applicable policies to the PAFs free of cost in local language and counseling over the same, so that the awareness level is increased since still around 15000 MW power is to be harnessed from hydropower in the State. Keeping in view the literacy rate of some places, help of energy or R&R professionals (retired or in service) or NGO’s should be opted for penetration of awareness regarding policies and rights.

13. The personnel dealing with R&R plan and issues in the project authorities must be experienced in R&R as a professional and must be acquainted with local customs.

14. All agreed issues should be made available in writing in local language to the PAFs, for reference later on.

15. The mode of acquisition and formulae adopted for ascertaining the acquisition cost of the land, house or other assets should be made available in writing in local language since even after 6-10 years of acquisition of land, other assets and having received the compensation for the same, PAFs do have questions regarding the valuation of their properties vis-à-vis other PAFs in same project or others
coming up which is not observed as a positive impact in the social environment of these socially close-knit people. Details of the assets under *mustarka khata* i.e. common assets held by a village or community along with their valuation and compensation paid out to each of the PAF should be made public, in writing, since no one of the respondents were able to say anything on this issue and are often suspicious over the issue.

16. It has been observed that the certain area, of the total land acquired for the project, is not required once the project is made operational and later on the land is used for other purposes. It should be made mandatory that the land which is of use during construction only, should be acquired on lease only from PAF which will ensure better and economical land use, less permanent displacement, less compensation paid out and hence, low cost of per unit electricity form the project, benefiting all. In the same sense depending on the life of the project, except areas like underground works, reservoir and important security sites etc. other areas can be opted on lease of period matching the project life.

17. One model of participation of PAFs and locals should be explored where all the PAFs and the Government put in their land as equity in the project so that there is a constant return through out the life of the project.

18. If the project authority is a company under the Law and is authorized to issue shares then the PAFs should receive
preferential treatment in allotment of the same, as is done in case of the employees of the developer company itself.

19. At least, for the PAFs whose main income source for sustenance is agriculture, the provision in R&R should be only agriculture land in lieu of agriculture land since, all of them are rendered jobless, as they do not have any other skill, which can make them employable. Moreover, earlier while the family is in agriculture all those working can be termed as employed.

20. In the studied projects, none of the project authorities had any facility for the training the PAFs or the local people at large so as to make them employable. Lump-sum money is not treated by PAFs as means for sustenance or indicator of economic prosperity and in majority of the cases termed as less. PAFs have also termed 'land for land' better than cash in lieu of acquisition of assets. If there are no employable skills in the members of PAFs or the local people then they should be trained for the skills required for the operation of the project since hydropower projects do have long gestation periods and they will definitely be employable by the operation stage of the project.

21. There should be a forum of developers which should coordinate for the training of the eligible and willing members of PAFs or the local people in each other project facilities on stipend basis so that overall there is a rich experienced and employable manpower available on a later date in the State.
22. All the employable youth and persons from the PAFs should be employed in the parent company of the developer, which will ensure permanent source of income for the PAF. It should be made mandatory that those employed receive counseling at particular periods regarding career advancements.

23. The certificate of PAF should invariably mention the names of all members of PAF.

24. Where there is unavoidable resettlement and rehabilitation issue, the earlier standards of living of PAFs, at the minimum, should be restored first before actual displacement, which is not evident now in cases of displacement. The plots allotted should be of certain standard with setbacks and all the facilities like drinking water, drainage, sanitation, and other facilities like community hall, street lighting, parks, grounds for kids, garbage disposal facility etc. should be provided and maintained at par with the developers residential colony. This will help in raising the living standard and also will help in diminishing the ‘local and company wale’ feeling in the project area. The land quality should be tested and reports be made available in public domain. Each resettlement site approval must follow strict adherence to quality standards and authorities should be made responsible, while according such approvals.

25. The allotted land / plots should be sufficient enough to accommodate cow sheds / cattle sheds and their should be
every possible effort made to save the local community grazing grounds or if the event arises that the fodder is to be purchased, the project authorities in co-ordination with PAFs, local habitants and local administration should carve a way out so that the economic impact is minimum on account of such purchases.

26. If any of the facility, to be provided to the PAFs, is require involvement of State agencies, the local administration then such authorities should act in timely and judicious manner e.g. in Kol dam project the drinking water problem is very acute and is persistent since the time PAFs have shifted (nearly a period of 6-7 years now) and NTPC has provided funds of around 6 Crore to IPH for last 2-3 years and still the scheme is not available. Any technicalities for the delay are not known hence, PAFs are impatient.

27. Any temporary arrangement of drinking water supply should be tested for potability before delivery.

28. At least one meeting of LADC (local area development committee) or LADA (Local area development authority) should be held in the project affected area in say six months, since the awareness about these important authorities is found very low and will benefit the administration / authorities and PAFs / local people mutually.

29. For any grievances against the developer, if not heard, there should be a clear cut line of communication along with contact details be provided to each PAF, in writing.
30. It should be made responsibility of the developer under oversight of local administration that each of the member of the PAF or the local person employed in the project directly (by the main developer) or indirectly (through contractor or the sub-contractor) are provided with ESI card and are covered for various benefits under the scheme since, hydropower projects are generally in rural areas where level of awareness of usually low. Local administration should carry out special audits to ensure the same.

31. There is dire need to identify local artisan and protecting their knowledge by rehabilitating them so that the art is saved and the artisan is not pushed to change business for sustenance. In no way compensation paid to local artisan can ensure his sustenance since his skill finds no employability except in his field of expertise.

32. All the natural sources in and around the project area are to be identified and finalized with consent of the PAFs / local people. Thereafter, during the construction or operation of the project, routine inspection of the natural sources should be carried out and suitable measures be taken to maintain them considering the views of local people. Any depletion is to be suitably compensated for.

33. The roads are to be maintained during operation of the project, once made wider for construction.

34. All the cases of loss reported in and around project area due to the blasts made in the project area should be attended to on priority and root cause analysis be done by the project
authorities when the first complaints start pouring in so as to avoid any such losses of local population in future. Any compensation paid on the blast fall out should not be made a pass through in the tariff, as a part of the project cost.

35. Any land acquired should be paid as per the commercial rates only without any reference made to the agricultural or non-agricultural or commercial. For agricultural land, specifically, the rate must be determined based on the on the quality of the land / number of harvests made per year but in no way should be less than the commercial rates prevailing in the area.

36. Any damage to local passages or the roads due to construction activities should be attended to on priority and unnecessary delay in rectification of the same must be intervened by the local authorities, when approached. No such damages or compensation paid out be made a pass through in Tariff as a part of project cost.

37. Cremation ground should be made available on priority, along with displacement activity and with thorough knowledge of local customs other facilities should also be provided.

38. Local unemployed youth should be counseled for entrepreneurship development and provided basic funds to support the initial investments. The accumulated basic funds should be allotted by project authorities through local administration and independent panel of experts.
39. Since a project means influx of population in a limited area and increase in population density of that area hence, there has to be an increase in drainage, sanitation and garbage disposal facility of the area in a scientific manner and same has to be verified by the concerned State authorities on regular intervals. The mechanism and policy for the same should be put in place.

40. Education and health facilities should be made available free of cost to the members of PAFs e.g. buying a group medical policy for them and premium being paid / shared by the developer / authorities / PAFs can make the free medical facility for the members of PAFs feasible. The medical facilities should be made available at cheaper cost to the local population / habitants.

41. The resettlement areas should be more than just the plots or the land. Trees should be planted in the resettlement sites and local people can be hired for the safety and watering and care on regular basis along with the same responsibilities for the park and recreational areas. It will generate income apart from improving landscape of the project area.

42. For all the projects under operation or the projects under construction stage, the list of the PAFs along with their contact details and details like total assets like land, house etc. acquired, compensation paid, should be made available on public domain esp. on internet so that there is transparency and free flow of information for reference and analysis, as is envisaged in clause 9.3 of NRRP-07.
43. As envisaged in the NRRP-07 (National Resettlement and Rehabilitation Policy, 2007) under clause 9.2, National monitoring cell should be made on priority.

44. The Maternity benefits as per the 1961 Act (updated till date) for the females employed on contract indirectly in the project must be ensured. For females not employable or who are house wives only, there should be maternity benefits and facilities extended free of cost.

45. All the PAFs should be covered under one Group Insurance Scheme, premium of which should be paid / shared by the developer / authorities / PAFs for the benefit of the PAFs. There is also a need for the pension schemes for the PAFs at each nuclear family level, which should be worked out.

46. A provision of disablement benefit should be made for the members of PAFs on nuclear family basis so that in the event of disablement of a family member within 5 years from the date of displacement due to reason attributable to the new resettlement site, they are entitlement for the benefit and compensation for sustenance.

47. The services of sociologists should be hired in stages of acquisition of assets and later on for counseling and receiving feedback on social issues since maximum number of respondents has termed the social impact as 'negative'.

48. The ‘solar passive building design’ and ECBC (Energy Conservation Building Codes), 2006 should be made mandatory in project office buildings and residential colonies
along with the sites chosen for the resettlement sites. The more is the energy saved, the less is the requirement for establishing power projects in near future.

49. The previous experience gained in hydropower projects in the field of R&R should be used in the State in the field of land acquisitions for other infrastructure projects e.g. four laning of NH towards Manali is once again a concern for the PAFs of Larji hydropower project who have resettled along the NH in Aut, Thalout, etc.

50. There should be feedback mechanism in place after the acquisition and resettlement of the PAFs and the result of the survey (SIA post acquisition) should be sent to the State Government for perusal and at the same time the results of the survey should be shared on the public domain e.g. web site, local panchayats, lok mitra kendras etc. Any serious lapses should initiate action against the project authorities followed by penalties, if proved, and all the cost of R&R plan should not be made a pass through as project cost in tariff, till the grievances are attended to.

51. There is need to stress on alternate site plan involving lesser displacement or acquisitions.

52. Newer designs and technologies should be tried e.g. Verdant power is a company established in the year 2000 and is based in New York, NY. The company plans to develop electricity using under water currents of river flow. Core (Cornwall Ontario River Energy) project at St. Lawrence river, Cornwall, ON (Ontario), is phase-I pilot project. Ultimately
the project will generate up to 15 MW of power locally. The same needs exploration in the State.

53. The Government websites should be updated constantly for contact details of the responsible authorities. All the data should be hosted on web sites and cross linkage be provided.

All the suggestions / conclusions have been made after due interpretation of the primary as well as secondary data. All the four projects execution and establishment relate to different time horizons and are established under the régime of no R&R policy at National or State level, to intermediate policies and to current regime where there are National & State level policies in place enriched by experience gained in the past, are at place. Any lapses or aspirations, which are required to attended to, must meet justice, soon

At last but not the least, we should reduce electricity consumption for producing per capita of GDP rather than focusing on increasing the per capita consumption of electricity in the country since, the cost paid by the project affected families is too precious and respect worthy which should not, at all, be wasted by using energy inefficiently.