

Summary of the brain storming session  
on  
D.O.T. timber treatment technology

*TITLE:*

**ASF Nepal Sustainable Dialogues #1**

*DATE:* 20th August 2018

*TIME:* 4:00 pm

*LOCATION:* Dhokaima Café, Patan Dhoka

*ATTENDEES*

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17	Basu Ram Rijal	SSS	ED	M	basuram.rijal
18	Shita Ram Khatiwada	Khatiwada Furniture	Owner	M	
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*AGENDA*

- Discuss about the D.O.T. timber treatment, how it is done, its importance and its relevance in the context of construction and reconstruction in Nepal.
- To illustrate the use of D.O.T. timber treatment in the construction works of ASF Nepal projects.
- Discuss about ways to expand and bring this technology into the larger mass.
- To gain resourceful insight from individuals involved in different sectors such as NGOs, INGOs, Government bodies, entrepreneurs as well as local stakeholders on the matter of D.O.T. timber treatment.

*MATTERS DISCUSSED*

**How can we make D.O.T. timber treatment process more effective in Nepalese context – social, economic, technological?**

- The major way forward would be to link the treatment process with the community forest groups, by doing so the treatment process goes towards the core source.
- Awareness is the key. By bringing the information about this treatment process to the individual Household level, to the carpenters who work in cities, there will be more application of the process in grass root level.
- The community needs validation and evidence of its workability and effectiveness for them to accept anything new. If there is hard evidential data supporting the fact of durability of treated timber against untreated timber, its financial and other benefits, the community people would be more open towards using this treatment. Further, if we can provide the proof of the value added to the treated timber with quality control and branding, stakeholders and entrepreneurs will be confident to invest in this technology regarding high return value. Moreover, if institutions like IOE and NAST validate the research based data on the benefits of D.O.T. timber treatment process, people are more likely to accept this technology on the basis of these validated research outputs.
- D.O.T. timber treatment may be a cheap process but it is also a tedious process. Wrapping wood in plastic for diffusion is a time consuming process. It is also not feasible to dip large sections of wood in the treatment tank. More research needs to be done to reduce the time and make this more feasible and easier system in the Nepalese rural context.
- It is also imperative to make the chemicals more easily available in local level as it can only be bought in Kathmandu presently.

**What should we do to promote this technology in reconstruction and other construction works?**

- The outreach program needs to be strengthened. By involving a larger mass of entrepreneurs, community forest groups as well as the woodworkers/ carpenters, more and more of them will implement and suggest the use of DOT timber treatment to their client. The Department of Forest could also be involved and informed about this treatment process and its positive implications in construction.
- Margin profit for selling imported wood is high and advertising cannot be done by small entrepreneurs. So, publicity and awareness among the local community, the ones whose houses are going to be constructed, will help in a larger scale social acceptance of the treated timber.
- Another thing that needs to be taken into consideration is the time and cost factor as the labor cost is high for DOT timber treatment.
- Certification of the treated timber proving that it comes from a sustainable source can also be another way of making this more attractive towards clients.

**How can we make this technology easily available to the users – type HHs, heritage buildings, furniture factories, may be handicraft industries, any others?**

- One thing that can be done is making amendments in the National Building Code. By making treatment of timber mandatory owing to its benefits in the long run, we can increase the scale of its use, not only in construction/ reconstruction of buildings but also in furniture and related industries.
- The timber imported from abroad may be of lesser strength than DOT treated timber but its aesthetic beauty is greater which results in more number of people opting for imported timber. The aesthetic implications also need to be considered for the DOT treated timber.

**What additional research do we need to take this technology further?**

- There is immediate need to convert the assumptions into fact. The benefits of the DOT treated timber needs to be validated and presented as research based evidence to eliminate any doubts/queries.
- There is a need of survey on the harm done by termite infestations in the heritage buildings and residential buildings. Furthermore, the curriculum in the universities needs to be updated to include usage of treated wood in earthquake resistant building design.
- There needs to be more research on the benefits of DOT timber treatment such as the increased longevity of timber as well as the effect of water/rain on DOT treated timber. It is also imperative for there to be a concrete reassurance that this treatment method is the complete package and no further actions need to be taken for the further treatment of timber.
- Standards have to be developed through research (academia involvement) and other information like seasoning, good construction technology while information needs to be disseminated.

**Do we need to upscale these kinds of program for advocacy in larger scale?**

- There is a great need for the discussion in policy level by including representatives from the Department of Forestry in the next meeting.
- Before moving towards larger scale, this technology needs to be validated for social acceptance of the technology and its products.

*CONCLUSION*

It can be concluded that there is need of hard evidence and validation of the benefits of DOT timber treatment against untreated wood. Its economic benefit also needs to be presented in the form of calculated data. By involving research and educational institutions in the study of DOT timber treatment, the fact that treated timber lasts longer and is more economical in the long run can be backed up by studies and facts. This will not only make it easier for entrepreneurs and stakeholders to invest in the initial cost of the treatment process, but also reassures the local community of the authenticity of the treated timber's benefits.

Furthermore, there needs to be a larger scale involvement of all stakeholders for the publicity and awareness in the local communities to promote the DOT technology to treat timber.