

Appendix B

Recommendations by Members of the Public

Oaxaca, Mexico

13 May 2014

The more than one dozen expert presentations at this Joint Public Advisory Committee meeting were witnessed by 120 participants from the three countries, both in person and on the web, and the resulting participant dialogue was both broad and deep and revealed the complexity of the topics under discussion.

The city and state of Oaxaca, Mexico, were an apt host location for the meeting, being home to 19 indigenous groups and containing three UNESCO World Heritage sites: the archeological site of Monte Albán, the prehistoric caves of Yagul and Mitla, and Oaxaca's city center. The youngest of these dates to the middle of the last millennium, and the oldest, to 1,300 years before the Common Era. Truly it was fitting to have come together in a place with such outstanding examples of enduring indigenous and colonial architecture.

During the public review, JPAC heard a wide variety of opinions and suggestions regarding the role the CEC can play to help indigenous and vulnerable peoples overcome barriers to sustainable housing. Those suggestions can be grouped into several categories:

- The manner in which **local peoples' knowledge, materials, needs and wishes** are considered with regards to housing and other projects. The most successful efforts reported on during the meeting were those that engaged local communities throughout planning, design and execution cycles. Those efforts often took advantage of local materials, construction styles, and techniques, and complemented them with contemporary understanding of architecture and technology.
- The need to look at **housing through a systemic lens** that includes such factors as health, sanitation, food systems and other basic elements of life. Approaching housing issues in this manner would require **multi-level and interagency cooperation**, both nationally and internationally.
- The importance of improving the quality of **building materials** and reducing any risks of pollution posed by them throughout their entire life cycle.
- The importance of **training and improving the capacity of local workforces** to help build and maintain new and retrofitted housing.
- The urgency of **identifying and increasing financing mechanisms** that can address the unique needs of indigenous and vulnerable populations of the three countries. Specifically, this would include programs that are responsive to individuals or communities who work in the informal sectors of the economy, or who may not live under traditional land-title arrangements and are thus unable to secure mortgages, or who may or may not be managing their own (likely phased) construction processes.

- The need to engage in sustained, targeted and locally appropriate **outreach and education efforts** for improving home health practices (such as reducing exposure to carbon dioxide).
- Future efforts to engage stakeholders on the topics of indigenous housing should include **more representation from indigenous groups**. Other stakeholders who should be represented at future meetings include: relevant government agencies (social, housing and health ministries and census agencies, for example).

Specific proposals toward these general themes included the following:

1. Identify local partners such as community alliances or micro networks who can identify opportunities and needs, funding, community leaders, knowledge “sharers” (who could assist with capacity building and training - “train the trainer”), local protocols and housing preferences.
2. Seek funding to encourage local groups to develop networks of local/regional partners or micro networks of local builders and partners.
3. Governments should promote integrative design and planning processes including multistakeholder, culturally appropriate design, emphasizing connection to people at local community level with an emphasis on public private partnerships.
4. It is important to work from a perspective of a dialogue of diverse knowledge (traditional values and knowledge about housing and land) combined with modern knowledge (atlas of risks, vulnerability and protected areas), to ensure the sustainability of policies and projects. They should take into consideration local perspectives for housing design.
5. Promote cooperation among the governmental agencies whose mandates relate to various aspects of a holistic understanding of housing. For example, health, social and environmental ministries might all have something to contribute toward building safe, efficient and locally sensitive housing.
6. Create financing tools to bridge “modern” land-title systems with non-traditional land tenure schemes (collective, communitarian or sovereign schemes, for example).
 - a. Policies to be pursued should facilitate banks working with tribal housing authorities because conventional loans do not work on reservations, due to different land ownership schemes.
7. Create financing tools to bridge traditional, formal financing mechanisms with informal economies, based on community needs.
 - a. Build in program flexibility and implementation based on feedback from community (iterative process, using micro networks, transparency)
 - b. Tools that allow pooled resources (e.g., “cajas comunitarias” – locally-run community banks based on trust)

- c. Identify and promote self-sustaining private sector actors that may not be traditional actors in areas of finance (e.g., “Mi Patrimonio Hoy” by CEMEX, which works with small groups without collateral to provide cement as needed on incremental housing projects)
 - d. Total cost of housing should include consideration of indirect benefits (health, social security, job creation/training, use of local materials, etc.)
 - e. Tools that are replicable and whose results are measurable
 - f. Tools that focus on marginal builders (‘auto-construction’)
8. Develop models of carbon cost calculations in property valuations to promote among industry leaders, perhaps with public-private partnerships. These models might include carbon-offset credits for green construction.
9. Promote the inclusion of “green” criteria in grant programs for renovations throughout the three countries.
10. Convene a group of experts and stakeholders from the health, housing, and environmental sectors to explore issues of safety and efficiency in new construction, as well as in retrofit initiatives.
11. Harmonize the three countries’ metrics dealing with sustainable housing for indigenous groups.
12. Gather data on various measures related to health and efficiency. This would best be done in collaboration with local communities, always taking care to build trustful and respectful relationships and ensure the return of relevant data to the communities from which they were gathered.
13. Establish a trilateral platform for the exchange of technologies and best practices for the production, use, and disposal of sustainable materials throughout the supply chain.
14. Establish a common standard between the three countries for native and industrialized construction materials with an eye toward pollution reduction and conservation. We recommend the following considerations for construction materials be included in the standards:
 - a. Cost efficiency
 - b. Ease of availability
 - c. Attractiveness
 - d. User- and ecosystem-friendliness
 - e. Local familiarity with the material and its accessibility for self-managed construction
 - f. Eco-friendliness from production of the material until the end of its useful life
 - g. Consideration of the material’s carbon footprint and ability to be recycled
15. Promote the transformation of traditional homes over time toward more robust construction of the core of the dwelling and local, traditional materials for its shell.

16. Create a trilateral strategy for outreach, incentives and financing to promote green building as a cost-efficient, sustainable option, with regard both to materials and also to water and energy use.
17. Promote alternative energies in remote communities in which there is no pre-existing power infrastructure. Train locals in the installation and maintenance of installations, where possible.
18. Create communication networks among the native communities of the three countries such that their needs can be channeled to the appropriate institutions.
19. Develop channels and empower communities to communicate their needs to their governments.