



Template for non-Party stakeholders' inputs for the Talanoa Dialogue

Question 1 - Where are we?

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The commitment (planned and/or announced) as well as the actions taken so far that are in line with aims of Paris Agreement, the 1.5/2 degrees' goal and the transition towards a net-zero emission society by this mid-century

The international scope of the Conference of the Parties on climate change (COP21) held in Paris in December 2015 significantly contributed to moving AVN's advocacy on environmental and climate issues to the international scene. Because the Nubian Vault technique is used to build low-carbon buildings, is respectful of local natural resources and allows for improved living conditions in the face of climate change, it is a solution that is becoming more widely recognized in terms of mitigation and adaptation to climate change.

AVN is now accredited to participate in the major international conferences on climate (UNFCCC) and desertification (UNCCD). This allows it to amplify its advocacy efforts vis-à-vis African political actors and international organizations working on these issues. From the start of the 2014-2015 season, AVN has supported negotiators in West African countries in preparing their respective commitments for the Paris Agreements, set out in the Intended Nationally Determined Contributions (INDCs). Thanks to those efforts, Nubian Vaults were mentioned as a solution for energy efficiency in Senegal's INDC and as a solution for adaptation of the construction sector to climate change in Burkina Faso's INDC. This work also led to Mali highlighting the benefits of NVs in its Strategic Framework for Economic Recovery and Sustainable Development (CREDD).

INDC Burkina Faso: "Promotion of local materials and of wood- and metal-free architecture (Nubian Vaults) to adapt to climate change in Burkina Faso's rural and semi-urban zones"

INDC Senegal: "Adoption of the Nubian Vault technique in rural housing and community infrastructure..."

CREDD Mali: "Initiatives aimed at the promotion, operation and use of local construction materials and at procedures well-adapted to the context and that comply with environmental standards will be emphasised. It would also behove us to favour earth-based construction techniques (Nubian Vault-style) without wood or imported materials..."

Progress made so far against the above commitments, including success stories, case studies and gaps

Since 2000, the goal of the Nubian Vault Association (AVN) has been to develop a market for adapted housing in West Africa, providing vulnerable populations access to affordable housing that is comfortable and well-adapted to climate change. AVN has also aimed to create green jobs, strengthen economies at all levels and develop an "adapted housing" sector. At the center of this programme lies an architectural concept that is both ancestral and innovative, based on local materials, economies and knowledge: the Nubian Vault technique.

AVN disseminates a low-carbon, energy-efficient building alternative in West Africa, the Nubian Vault (NV). Its innovative market-based programme is designed to address housing issues while creating additional income opportunities for rural smallholder households and enhance local economic development. Market is the optimal driver for large-scale dissemination and the appropriation of this innovation by all local stakeholders: civil society, private sector actors, public authorities and financial institutions.







Using only raw earth, a locally available material, the NV technique allows the construction of sturdy, weather-resistant, <u>low-carbon and energy-efficient buildings</u>, embedded in local economies and traditions, for wide-scale access to decent and long-lasting homes, wellbeing and social empowerment of present and future generations.

AVN is a non-profit social and green entrepreneur, with an integrated programme answering multiple issues:

- A Roof Sensitisation to the NV architectural concept, designed to improve living conditions at the base of the pyramid, and support to kick-starting local NV markets;
- A Skill Emergence of a quality production offer by technical and entrepreneurial training of NV
 masons, members of the very same beneficiary populations. Skills development and job creation
 enable their social and economical empowerment;
- A Market Political support and financial tools for the integration of the NV concept into development policies and wide-scale access to the appropriate housing market.

Quantitative impact so far with respect to mitigation, adaptation, resilience and/or finance

To date, the NV programme has allowed 2,500 building-sites to be realised (total surface area 98,750 sq.m.), 720 NV masons trained and 330 apprentices in training, 75,000 t. CO2 eq. spared, 3M€ local economies generated and 30,000 end-user beneficiaries living or working in Nubian Vaults.

From one region in one country in 2000 (Boromo in Burkina Faso), AVN's programme boasts today fourteen regional teams present in five countries (Burkina Faso, Mali, Senegal, Benin and Ghana), and stakeholders in neighbouring countries have expressed their interest for further programme deployment. 800 localities have seen at least one NV built in their area.

Mitigation: As no wood or straw, are required for the construction of a NV, the project contributes to alleviate the high pressure on standing tree and to preserve natural resources. As none of the building materials needs to be manufactured or transported long distances (iron sheets, etc. nor do any trees need to be cut down, the CO2 saved makes the NV an efficient tool in response to climate change mitigation issues. Lastly, by providing excellent thermal insulation, inhabitants gain comfort and save energy, reducing the need for fan or air-conditioning.

Adaptation: Made of sundried earth bricks, the NV uses only locally available raw materials. It integrates environmental sustainability in its value chain and generates a very low carbon footprint. The NV provides excellent thermal and acoustic insulation, offers extreme protection against heavy rain and wind, and strengthens local economies. Benefit on environment is even higher when considering the lifetime of a NV: a properly maintained NV house can last 50 years or more, compared to the average 10-year lifetime of tin roofing.

Finance: Mobilizing private capital for the NV market; NV clients usually participate in the construction of their own house (by providing local materials and workforce, which drastically reduces the price of the NV building) and pay the masons directly.