Participatory approach in planning for low carbon and ecovillage: A case of Felda Taib Andak

I Ngah^{1, 3} and A S Zulkifli²,

¹Centre for Innovative Planning and Development, Universiti Teknologi Malaysia, Skudai, Johor, Malavsia ²Faculty of Built Environment, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia.

Email: <u>b-ibrhim@utm.mv</u>

Participatory approaches have becoming an important tool in planning of sustainable communities. Although participation is conceived as a malleable concept there are certain methods that planners can adopt to ensure a meaningful participation. This paper will provide some experiences and lessons on how participatory planning could be carried out with local people, the role of planners in the process of plan preparation, implementation and the outcome. This paper first explores some of the meanings of participation, the criteria of participation and the approaches of participation in planning for sustainable community. The second part is a description and discussion of how participatory approach in planning was applied in planning for low carbon and eco-village in Iskandar Malaysia based on a case study of planning of Felda Taib Andak scheme. The participatory approach involved a series of meetings, site visit and focus group discussions with representative of the Felda Village to come out with action plan and actual implementation. From focus group discussions a roadmap consisted of a vision and objectives and a dozen actions were formulated and adopted. In the process of implementation the main implementation & coordination committee was form in which the author (planner) is one of its members to look into fund raising & implementation strategies together with the local people. Several task forces or sub committees responsible to implement the dozen actions were also formed. The outcome was encouraging in which some of the actions such as planting of bamboo trees, reduction of pollution from oil palm factory and bicycling activities has been implemented and shown progress. The paper also highlights some of the issues and challenges in participatory planning.

1. Introduction

During the last decade, many countries have been undergoing major changes both in their political, social and economic systems. Among the challenges that these countries have been facing is the issue of incorporating citizens into the decision - making process. Even though the process is slow and cumbersome, many countries are making great efforts to strengthen citizen participation in decisionmaking. Participatory planning is the key to sustainable development. Participatory planning increases transparency in the decision - making process. If citizens are involved in the policy development and implementation, they will be able to make government officials more accountable for their decisions. Citizens must be involved in the decision - making process because their input can help create useful solutions to the major problems that they face in their communities [1].

In Malaysia, the adoption of a bottom up and community participation in planning of a village, nationwide began in 2009 with the launching of the Village Action Plan by the Prime Minister. The

³ To whom any correspondence should be addressed.

Content from this work may be used under the terms of the Creative Commons Attribution 3.0 licence. Any further distribution $(\mathbf{\hat{P}})$ (∞) of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI. Published under licence by IOP Publishing Ltd

IOP Conf. Series: Earth and Environmental Science 18 (2014) 012150

doi:10.1088/1755-1315/18/1/012150 Village Action Plan adopts a bottom up approach to involve active participation of village communities in planning and delivery of actions to improve their wellbeing. As mentioned by Moselev [2], the active involvement of local and rural communities in planning is increasingly emphasized by governments in developed and developing countries. In Malavsia, the effort was initiated in mid 1990s when the government launched a new philosophy of rural development, giving greater emphasis to human development. The main programme under this new initiative is the Visionary Village Movement, encouraging village communities to plan and initiate rural development programmes. Early initiatives involved training or capacity building of the rural leadership i.e. the Village Development and Security Committee (JKKK) in the planning and management of the village activities and projects. The approach is relatively new in Malavsia, although the concept of community participation has been emphasized since independence. The recent initiative was the development of an eco-low carbon village in Taib Andak as a pioneer projects to involved communities to participate in realising the low carbon society in Iskandar Malaysia. This paper will describe the experiences and discussed the outcome, its prospects and challenges in empowering local communities in planning.

2. The Concept of Community Participation

Participatory approaches have been widely incorporated into policies of organisations from multilateral agencies like the World Bank and International Monetary Fund (IMF), Bilateral Agencies, to the smallest non-governmental organisations [3]. Indeed, some observers have argued that, in terms of thinking and practice about development, we are currently in the 'age of participation' and it is the 'paradigm of people' [4]. However, participation is a concept that means different things to different people and organizations in different settings [5]. For the purposes of this article, the definition of the World Bank's Learning Group on Participatory Development will be adopted "a process through which stakeholders influence and share control over development initiatives and the decisions and resources which affect them" [6]. The broad aim of participation in development is to actively involve people and communities in identifying problems, formulating plans and implementing decisions over their own lives [7]. Bringing a broader range of people to the planning process provide access to a broader range of perspectives and ideas.

There is broad agreement that community-based interventions have the potential to be more responsive to the needs and priorities of beneficiaries. There is also some evidence that communitybased projects are comparatively cost effective because of lower level of bureaucracy and better knowledge of local costs. Most of these projects draw primarily on locally available skills, labour, materials and financing. The accountability of providers to the poor can also be strengthened through mechanisms for poor people to voice their priorities and views [8].

According to World Vision [9], participation is most effective when it respects people's knowledge and skills, empowers people to take control of their lives by focusing on training, resourcing and supporting people to make their own decisions, includes all of the people in the community i.e. men and women, aged and disabled, religious and ethnic minority groups, is flexible, not bureaucratic, adapted to the local circumstances not bound by outsiders' rules and timelines.

And there are counter arguments that suggest that participatory processes may not necessarily lead to quality plans. High levels of participation may increase conflict by having disputing parties at the negotiating table, frustrate planners by slowing down the decision-making process, and most importantly dilute the strength of the final agreement by having to balance competing interests [10].

3. Case Study of Community Participation in Felda Taib Andak

This project is a part of the initiative under low carbon society research project in Iskandar Malaysia undertaken by UTM, Iskandar Regional Development Authority (IRDA), and partner agencies from Japan. The study focus on the formulation of community action plan and community participation to develop low carbon lifestyle / living among rural communities. It incorporate the application of low carbon mitigation measures and low carbon lifestyle in a village community including the practice of energy saving, 3-Rs (recycle, reuse and reduce), production of green products and others.

Felda Taib Andak is chosen as a pioneer project as it is located in Iskandar Malaysia and being among the earliest Felda Scheme in Malaysia. The development of the Taib Andak scheme began in 1960 with intake of 620 settlers occurred in 8 phases from 1960 to 1971. The scheme consists of

IOP Publishing

IOP Conf. Series: Earth and Environmental Science **18** (2014) 012150 doi:10.1088/1755-1315/18/1/012150 171.18 hectares of settlement area and 29,992 hectares of plantation. The settlement is equipped with social facilities (primary school, religion school, health clinic, shops), water, electricity, good road network and a palm oil factory).

3.1 Methodology

There are four stages in the process of community engagement for the development of low carbon eco-village. These are informing and getting consensus from the respective authority and the community to execute the project, plan making through focus group discussion (FGD) and meetings with representatives of the communities), implementation (formation of implementation committees and implementation) and monitoring. The process involves continuous engagements with the community and exchange of knowledge and experiences among the expert group (facilitators) and communities. The feedback on the progress, issues and problems, and successes were discussed and used to improve future actions for achieving the vision.

Methodology of FGD for the formulation of action plan and roadmap was adapted from the technique used by Shiga Prefecture (Figure 1). The process is divided into two stages. The first FGD focuses on identification of vision, measures, issues in implementing measures and priority. The second FGD looks into detail the time frame and schedule for the implementation of each action identified in the first stage.

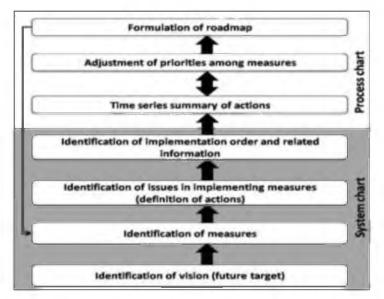


Figure 1. Methodology for formulation of action plan and roadmap.

The first FGD was held in the community centre of Felda Taib Andak on 30th October 2011. It was attended by 28 participants including the head of village, representative of Felda settlers according to blocks, members of women group, imam of the mosque and FELDA officers. The FGD was facilitated by a team from UTM (2 staffs assisted by 4 research assistants). The objectives are firstly, to inform village people on the idea of low carbon society and how it could benefit the community and contribute the global agenda, and secondly, to obtain consensus on the future goals and measures for the implementation of the project.

During the first FGD, the village people were briefed on the project and the idea of LCS. It then followed by discussion/ brain storming session on vision and measures to achieve LCS. In the discussion every participants were given opportunities to contribute ideas by asking them one-by-one around the table. This approach avoids the domination of discussion by a single or a few persons. All the ideas were noted on the white board and *mahjong* papers. The list of ideas on vision and objectives were refined in which a few broad statements on future aspirations were considered for vision statement and the more detail/specific statements were considered for objective statements. As for measures/actions to achieve the vision there were more than 20 ideas listed. We decided to select 12 (a dozen actions). The selection was based on a simple voting system in which each

IOP Conf. Series: Earth and Environmental Science **18** (2014) 012150 doi:10.1088/1755-1315/18/1/012150 participant was allowed to select/vote four preferable actions. So the 12 most preferable actions based on the total number of votes received were finally selected which reflected a majority choice (Figure 2). This approach appears to be acceptable in reaching consensus among participants.

The second FGD was conducted a month later on 11th December 2011. The objective was to look into detail the 12 actions identified during the FGD1 particularly to decide on the schedule of implementation. The outcome of both FGD1 and FGD2 will become a blue print or road map to guide implementation.

Output From First Focus Group Discussion

VISION

• To create Felda Taib Andak as a model village for the rural communities that are environmentally friendly and low carbon.

OBJECTIVES

- To inculcate low carbon behaviour and lifestyle among the community.
- To reduce the cost of living and spread benefits to the community.
- To improve health, freshness and green environment.
- To generate income from the green economy.
- To reduce dependency on chemical substances.
- To promote tourism activities.
- To strengthen cooperation between the community and agencies involved.

Dozen Actions

- Effective Microorganism (EM) / composting project
- Plantation of *'buluh madu'* bamboo
- Provision of recycling bin at each blocks
- Mosque energy saving (solar system) and housing energy saving project
- Promotion of the use of bicycle
- Control air pollution from factories
- River rehabilitation project
- Organic farming livestock and vegetables (Edible Garden Felda and Women Open School)
- Social awareness program (Environmental Carnival and school environmental awareness)
- Provision of pedestrian path
- Zero open burning
- Rain water harvesting for domestic use.

Figure 2. Output From the First Focus Group Discussion.

3.2 Implementation

The good aspect about the participatory approach in this project was that the plan was linked directly to implementation. The formation of implementation committee and task force seems to be effective in moving the initiatives. The task force also manage to design logo and produce T-shirt for members each used different colour to create differences.

Some of the actions can be implemented easily without involving a lot of funding and it also used the existing resources available in the village. Among the actions that has been implemented earlier were planting of bamboo trees, establishing bicycle club, reducing smoke emission from palm oil factory. The planting of the bamboo trees was initiated by one of the committee members who happened to have 20 bamboo seedlings obtained from outsides the village, ready for transplanting. When the idea of planting bamboo was first introduced the sample of the seedling was brought to the meeting room during the focus group discussion session. The idea of planting bamboo "madu" was attractive because apart from the claim of it high CO2 absorption capability, the plant shape and texture produce nice landscape effect. The edible bamboo young shoots was said to have "sweet taste" and preferred among local. Currently the prices of young shoots in the market are RM5 each and have good potential for earning if planting in large scale. Since the supply was limited the first batch of

IOP Conf. Series: Earth and Environmental Science **18** (2014) 012150 doi:10.1088/1755-1315/18/1/012150 seedlings were used for breeding and later on will be distributed/sold to other members of the community.

Promotion of the use of bicycle is to encourage residents to cycle and live a healthy lifestyle and reduce pollution. The action on establishing a bicycle club and promotion of used of bicycle began on 19th Feb 2012, with the launching of cycling club of Felda Taib Andak. About 100 villagers participated in the launching event initiated by one of the task force. From the experience of the event it appeared that the response from the community was encpuraging. But there were voices concerning the safety of cycling since the main road in the village was quite busy, narrow and need bicycle lane to ensure separation from motor vehicles. The hot tropical climate and frequent occurrance of heavy rainfall pose another challenges for maintaining cycling habit among the people.

4. Lessons Learn

•

- The approach of LCS that involves active participation of stakeholders appears to be effective in creating awareness and commitment to the implementation of low carbon initiatives.
- The village people with intermediate level of education tended to understand and appreciate the concept of low carbon in a very short duration.
- They have good spirit to implement the proposed actions.
 - The success of organizing FGD in Felda Taib Andak is due to several factors:
 - a) Good cooperation from Felda both from regional and local management team.
 - b) There is a well-organized settlers association in Felda scheme which have lots of experiences in organizing community activities in the past.
 - c) The members of settlers committee appear to have a good PR and communication skills.
 - d) Felda has good facilities for community meetings.
- Maintenance of continuous contacts through meetings, discussions and visits from researchers is very important to create interest and commitment among the villagers.

5. Issues and Challenges

- Those who participate in FGD are the one who are active members of existing organization in the scheme. We are not very sure on the respond from the rest of the community in the Felda scheme.
- Some of the actions proposed require large funding and specialized skills to implement which is not available locally.
- Not all villagers and also housing areas in Iskandar Malaysia have a well-organized organization such as in Felda. So, the implementation of FGD in other settlements which do not have good leadership and organization could be problematic.
- Need to maintain momentum in the implementation of LCS in Iskandar Malaysia and also to display high commitment and seriousness in the implementation of LCS by the government in order for the people to accept the idea.

6. Conclusion

The case study of planning of low carbon eco-village in Taib Andak shows the potential of participatory approach in plan making at community level through interface between professionals and local community. The interface of technical knowledge from professionals and experiential or tacit knowledge from local people provide good basis for sustainable planning which fulfil the needs and priorities of the local people as well as rational procedure of plan making. This kind of planning approach has its root in transactive or communicative modes of planning theory [11]. The strength of the approach is that it explore and divulge the local resources potentials and to act within the capability of the community. Implementing planning with the local participation also enhance spill over effect to the locality due to the existing networks and linkages already present among the local people. However, participatory planning needs to be planned properly. Poor organisation of participatory planning activities may result in deficiency of the outcome such as biasness of participation, poor attendance, lack of interest and ideas from participants.

IOP Publishing

IOP Conf. Series: Earth and Environmental Science 18 (2014) 012150
doi:10.1088/1755-1315/18/1/012150

References
Provide Content of Content

- [1] Sulemana M and Ngah I 2012 European Journal of Social Sciences 28 24 34
- [2] Moseley M 2002 Planning Practice & Research 17 387-405
- [3] Blackburn J and Holland J 1998 *Who Changes? Institutionalising Participation in Development* (London:Intermediate Technology Publications Development Studies).
- [4] Muraleedharan K 2005 Participatory Rural Development: Some Observations on the Reality and Rhetoric of Participation from Real World Experiments homepage http://cloud2.gdnet.org/~research papers/
- [5] Cohen J and Uphoff N 1980 World Development 8 213–35
- [6] World Bank 1996 *World Bank Participation source book* homepage http://www.worldbank.org/wbi/sourcebook/sbintro.pdf
- [7] Sulemana M and Ngah I 2012 European Journal of Social Sciences 28 24 34
- [8] Rabinowitz P Participatory Approaches to Planning Community Interventions homepage http://ctb.ku.edu/en/tablecontents/sub_section_main_1143.aspx
- [9] World Vision 2002 *Transformational Development Indicators Field Guide* (Washington: World Vision Development Resources Team)
- [10] Alterman H and Hill 1984 *Town Planning Review* 55 177-96
- [11] Friedman J 2011 Insurgencies: Essays on Planning Theory (London: Routledge)