



## STAKEHOLDER ANALYSIS FOR CLIMATE SMART AGRICULTURE

**Pankaj Kumar Meghwal<sup>1\*</sup>, Rajkumar Josmee Singh<sup>2</sup>, N.B. Jadav<sup>3</sup> and R.P. Rajput<sup>4</sup>**

1. Ph.D. Scholar, College of Agriculture, J.A.U., Junagadh, Gujarat, 2. Assistant Professor (Agril. Ext.), CPGS, CAU(I), Umiam, Meghalaya, 3. Programme Coordinator, Krishi Vigyan Kendra, Pipalia, Junagadh Agricultural University, Junagadh, Gujarat, 4. Ph.D. Scholar, College of Agriculture, J.A.U., Junagadh, Gujarat.

\*Corresponding Author: Email-[pankaj\\_00982@yahoo.com](mailto:pankaj_00982@yahoo.com)

### Introduction:

Stakeholder mean any person, agency, institutions or organization, who having any positive or negative stake or interest with respect to particular aspects or decisions of other related stakeholders.

**Reed *et al.* (2009)** defined stakeholder mapping (or “Stakeholder Analysis) as a process that (1) defines aspects of a social and natural phenomenon affected by a decision or action; (2) identifies individuals, groups and organizations who are affected by or can affect those parts of the phenomenon (this may include non-human and non-living entities and future generations); and (3) prioritizes these individuals and groups for involvement in a decision-making process.

**Meghwal and Singh (2016)** in their study revealed that Countrywide many initiatives on mitigation and adaptation approaches in coping with the climate change for smallholder vulnerable farmers to increase their production through adoption of appropriate techniques fail due to inadequate attention to interests and characteristics of stakeholders.

Smart agriculture included any type of advanced techniques used in the field of agriculture for reducing damages by adverse climatic conditions which are not suitable for optimal production and productivity. For example; when a farmer utilizes weather forecasting information for reducing the negative effects of risky climate conditions and another farmer uses polyhouse & greenhouse for controlling temperature & humidity than it should be included in climate smart agricultural practices.

**Varadan and Kumar (2014)** in Tamil Nadu found that majority of farmers decided and strived to remain resilience in agriculture by adopting various indigenous adaptation strategies like manipulating the sowing dates, reducing in fertilizer application, changing cropping patterns, selecting alternate crops and drought tolerant varieties.

Countrywide many initiatives on mitigation and adaptation approaches in coping with the climate change for smallholder vulnerable farmers to increase their production through adoption of appropriate techniques fail due to inadequate attention to interests and characteristics of stakeholders. Whenever any policy or programme implemented for benefits of public than it is very crucial and important point that stakeholder analysis must done before actual implementation of programme or policy. Task should be distributed according to proper power, interest and legitimacy of stakeholder analysis so that those people having actual interest for work; should get right power and proper legitimacy for their affords did by them.

In agriculture field also same principle applied because in this field a range of stakeholders involved for farmers and agriculture development *viz.* Agricultural Produce Market Committee (APMC), Agricultural Technology Management Agency (ATMA), College of Agriculture (CoA), College of Horticulture (CoH), State Agricultural Universities (SAU's), Central Agricultural Universities (CAU's), Co-operative Societies, Department of Animal Science and Dairy Science (ASDS), Farmers, Financial Institutions, Input Dealers, Irrigation Department, Krishi Vigyan Kendra (KVK), Non-Government Organizations (NGOs), Panchayat, Political Leaders, State Department of Agriculture (SDA) and State Department of Horticulture (SDH), Indian Council of Agricultural Research (ICAR) and other Training & Research Institutions *etc.* This stakeholder should be the vibrating agent in further interventions of agricultural innovations apropos of climate change in agriculture and allied activities for decision making, policy and programme formulation for mitigation and adaptation practices for Climate Change in agriculture by farmers. There remained a serious issue of concern that combating climate change by hard working farmers of the study area remained in jeopardy when the weaker stakeholders did not come forward and support the farmers. This is owing to the fact that climate change affects everyone but do not affect everyone equally. The poorest of the poor will be affected to the extreme if not appropriate strategy is developed and taken care of. So there lies the importance of cooperation, coordination and synergy in sharing their Power, Interest and Legitimacy of different stakeholders for helping and transforming the present agricultural systems to meet the every growing climate change impacts in agriculture. The role of stakeholders such as state agencies and other national-level actors in actively promoting adaptation (planned adaptation) across governance levels—or fostering adaptation at the individual and community levels through the facilitation of an enabling environment –has been the subject of recent debate. It involves actors and institutions at multiple levels, binding for financial resources, constructing and maintaining institutions, prioritizing actions, and determining the allocation of scarce and competing resources. As such, the extent to which planned mitigation and adaptation contributes to the improved mitigation and adaptive capacity of small scale producers would be determined, in part, by the relative Power, Interest and Legitimacy of stakeholders within the climate change mitigation and adaptation regime.

Therefore, Agricultural extension systems should be transformed; farming systems based strategies should be planned according to level of vulnerability – taken into consideration the social dimensions. Proven and tested *i.e.* validated mitigation and adaptation scientific package of practices on agriculture should be disseminated from different stakeholders by way of participation. Information and Communication Technologies (ICTs) based Agro-advisory Services would play a surmount role on dissemination and receiving of critical information to and from farmers *vis-a-vis* important stakeholders thereby taking an appropriate decision in right time at right place.

**Suggestions to overcome the problems faced by farmers:**

Provisions for modern ICT enabled agro-advisory services from the research and training based stakeholders should be mandatory. Stricter on agricultural land transformation to non-agricultural land, participatory based agricultural land planning at block; district and state level should be implemented as soon as possible. Regional Meteorological forecasting

station which enables pest and diseases forecasting facilities should be readily available for regular broadcast to the needy farmers. This initiative may be taken up by state as well as national research institutes. More initiatives at village level in order to make agriculture more remunerative and to attract rural youth should be planned. Supply chain management should be handled by state departments of agriculture, horticulture and other identified stakeholders jointly so that villages are well connected to regulated markets – mandis, hatts etc. Transparent and participatory market structure not only the physical infrastructure but also the organizational structure should be scientifically designed with consultation to AGMARK. Current central and state level finance and insurance schemes/initiatives/provisions for farmers should be separately dealt by a dedicated village level official body where there is no hassle and tussle for lengthy paper and documentary works for the farmers; rather it should be an IT enabled services for the farmers.

#### **Recommendations:**

The key stakeholders should be identified by any Government/Private agencies before introducing any new program. On the basis of Power, Interest and Legitimacy, stakeholders should be given task related to Climate Change in agriculture. Appropriate information based on level of knowledge and based on felt needs of identified farmers for on climate change mitigation and adaptation practices should be provided by Knowledge Management Portal on real and correct time.

#### **References:**

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