ACCESS AND BENEFIT SHARING (ABS) OF BIO-RESOURCES: EXTENT OF AWARENESS AMONG THE STAKEHOLDERS IN INDIA

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Abstract—Nagoya Protocol provides for the fair and equitable sharing of benefits derived from the utilization of bio-resources, the complexity of the regulations always acted as a barrier to reap the benefits of bio-resource utilization. The present study has analyzed the extent of awareness about the ABS among different stakeholders. A multi stakeholder approach was adopted to determine the awareness at each level of implementing the ABS and an ABS Awareness Index was developed. The lack of knowledge about ABS was found high among local communities, traditional knowledge holders who are the custodians of the bio-resource and its associated traditional knowledge. Results revealed a low to medium level of awareness about ABS and its provisions among the stakeholders.

INTRODUCTION

Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity was adopted at the tenth meeting of the Conference of the Parties on 29th October 2010, in Nagoya, Japan. The Protocol entered into force on 12th October 2014. The objective of the Protocol is to provide appropriate access to genetic resources along with the fair and equitable sharing of the benefits arising from the utilization of genetic resources.

ABS provides for the fair and equitable sharing of benefits derived from the utilization of bioresources, the complexity of the regulations alongwith the social and educational backwardness always acted as a barrier to reap the benefits of bioresource utilization. Awareness about ABS is essential for the better implementation and performance of it among the providers and users of the resource. Therefore, the present study has analyzed the extent of awareness about the ABS among different stakeholders.

METHODOLOGY

A multi stakeholder approach was adopted to

determine the awareness at each level of implementing the ABS. The sample respondents in India were purposively selected based on the availability and accessibility representing each stage in implementing the ABS. The respondents like officials, administrators, research scientists and subject experts were interviewed by mailing the questionnaire. Telephonic and in-person interviews were adopted for personal interview method with BMC members, users and providers of resources.

In the present study to know the extent of awareness about the Nagoya Protocol on ABS, ABS Awareness Index was developed. Various stakeholders selected as sample respondents were asked to express their awareness about ABS on three point continuum as fully known, partially known and unknown with the score of 3, 2, 1 on pretested provisions of the act. In order to quantify the awareness, awareness index was framed with the following formula;

ABS awareness index = Obtained score

Maximum possible score

Further the respondents were classified into three categories *viz.*, low awareness, medium awareness and high awareness using cumulative square root frequency method.

RESULTS AND DISCUSSION

Respondents were asked about the various provisions of the ABS regulations, rights endowed and their participation. The responses were scored in a 3 point continuum of 'fully known', 'partially known' and 'unknown'. Awareness of each stakeholder was captured with the help of statements that were related to ABS. The final scores were made into an awareness index and with the help of visual binning index, respondents were classified into three groups of 'low', 'medium' and 'high' level of awareness.

The percentage of stakeholders falling under various levels of awareness category is depicted in Table 1, and Fig. 1 depicts the distribution of awareness regarding ABS among the groups. The lack of knowledge about ABS was found high among local communities, traditional knowledge holders who are the custodians of the bio-resource and its associated traditional knowledge. Majority (86.67%) of the people in local communities and traditional healers had low awareness regarding

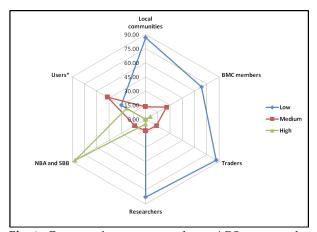


Fig. 1. Extent of awareness about ABS among the stakeholders

their rights to claim the benefits derived by providing the resources. Since majority of them did not know the economic value of the resource and availability of such high value markets for the bioresource they used or found in their locality. Similarly very high proportion of traders (86.67%) who intended to be a part of the value chain and did not contribute towards conservation but rather aided exploitation of the resources also showed low awareness. The awareness about ABS was high (86.67%) among more number of officials of NBA and SBB as they were directly involved on implementing the ABS mechanism in the country. They had the responsibility of identification, conservation, training and development of framework suitable to render the provisions of the protocol in the national, state as well as the local level. Monitoring of any exploitation of the resources by commercial entities as against the ABS regulations, 2014 was under the purview of the NBA and SBBs.

More than 46 per cent and 30 per cent of users of the resources like the companies and manufacturers had medium and low awareness levels, respectively. They certainly knew the requirements and legal obligations to be met before procuring the resources to develop products. As expected, more than twothird (68.57 %) members of BMCs at the village/ panchayat levels had low awareness and one-fourth of them possessed medium awareness. Majority (82.50%) of researchers in academic institutions contributing to the scientific knowledge were less aware regarding the provisions and regulations of ABS. Researchers do contribute to the scientific development of products that have high market value using bio-resources but unknowingly aid in it's unscientific exploitation by the industries.

There were no respondents among local communities and traders who were highly aware about ABS. ABS awareness and training programs

Table 1. Extent of awareness about ABS among the stakeholders (in number)

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SI. No.	Category of stakeholder	No. of respondents	Low	Medium	High
1.	Local communities	45	39(86.67)	6(13.33)	0
2.	BMC members	35	24(68.57)	9(25.71)	2(5.71)
3.	Traders	15	13(86.67)	2(13.33)	0
4.	Researchers	40	33(82.50)	5(12.50)	2(5.00)
5.	NBA and SBB officials	15	0	2(13.33)	13(86.67)
6.	Users*	30	9(30.00)	14(46.67)	7(23.33)

Figures in parentheses indicate percentage to the total

^{*}Respondents from pharmaceuticals, ayurvedic and cosmetic companies

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conducted were restricted to representatives of BMCs and people involved in documentation of PBRs. The socio-political factors restricted the awareness about the ABS due to various reasons. The poor living status and the adherence to the traditional way of life contributed to lack interest in knowing about the new policies.

The aforesaid results revealed a low to medium level of awareness about ABS and its provisions among the stakeholders. Rana (2010) also stated the lack of adequate awareness about this national legislation among the general public and also among the policy makers. Due to this lack of awareness about the protocol, regulations and rights, the benefits of the policies do not reach the desired people.

CONCLUSION

A concerted effort is warranted in this context for the deliberation of awareness about ABS among the stakeholders for the better utilization of provisions and benefit realization out of it by the communities. Responses from the various stakeholders revealed

lack of coordination between the government department, unawareness of local communities regarding the provisions of ABS and their inability to articulate their rights was the reason for poor implementation of ABS all over the country. ABS has given a ray of hope to the providers of bio-resource for getting the rights over the resources and associated traditional knowledge but a proper implementation is demanded. Enhancing awareness among these stakeholders, as well as achieving coordination among different implementing agencies are continuing challenges in the successful implementation of the ABS.

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