

**Comments on Draft - Scientific Social Responsibility (DSSR) Policy 2019**

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Disclaimer: The views expressed in this paper are those of the study group members and not necessarily shared by the institutions to which they are affiliated.

## **I Introduction**

The draft Scientific Social Responsibility (DSSR) Policy seeks to create a framework of ethical responsibility for scientists and organizations engaged in science and technological research in India. The DSSR provides a new direction to the link between science, technology and society. In this regard it departs fundamentally from the earlier policies - Scientific Policy Resolution 1958, Technology Policy Statement 1983, Science and Technology Policy 2003 and Science Technology and Innovation Policy 2013 – the primary focus of these policies had been to establish research centers and build a system of innovation and dissemination of technology through these networks.

The Study Group studied the SSR, with a view to discuss and comment on the following aspects:

- What is the relationship between science, technology and society?
- What is the nature and scope of the ethical responsibility?
- On who or on which legal entities does the ethical responsibility lie to undertake DSSR?
- What is the system of incentive provided to undertake DSSR?
- What is the implementation and review process for DSSR?

The comments are structured in three sections. First, we provide some general comments which address the specific aspects highlighted above. Second, this is followed up by remarks with reference to specific paragraphs of the DSSR and third, some concluding comments.

## **II General Comments**

- a) The DSSR states that it wishes to develop linkages between science and society with the objective of engaging with scientific knowledge in achieving social goals. Science and technology (S & T) is both a product of society as well as a process to address social needs. The relationship between S & T and society is mutual and dynamic in nature. The goals, objectives and imperatives of S&T are not exclusive but shaped by the

society. Therefore it is imperative to recognize the implications of this two way process. First, the scientific community (individuals and organizations engaged in S&T research and dissemination) should respect and acknowledge the knowledge commons and social relations that create the conditions for the practice of S&T. This is coupled with an obligation to understand and accept that ultimately all practice of S&T should contribute to the public good. The SSR privileges the role of scientists as an outsider to society and therefore construes the ethical obligation as a “give back” or philanthropy to less endowed stakeholders. This is factually, morally and ethically an incorrect position. This fundamentally misconstrues the dynamic and the two way relationship between society and S&T. The ethical responsibility of the scientific community towards society is based on the fact that it is a part of the society and like all constituents of society it should act to enhance public good and desist from actions that trigger public harm or undermine constitutional goals.

- b) The substantive scope of the ethical responsibility has not been spelled out in much detail in the DSSR. Although references are made to the Sustainable Development Goals and Technology Vision 2035 Prerogatives, there has to be greater engagement in the DSSR on the substantive goals which it addresses. Given that Sustainable Development Goals – specifically climate change – is one of the foremost governance challenges confronting India. Hence, the DSSR should identify specific areas of action addressing these governance challenges. This would also provide a clearer guidance to the scientific community in terms of prioritizing and pursuing future plan of action to address them.
- c) The DSSR only includes public organizations and private knowledge institutions. It is unclear as to the reason behind the exclusion of other private entities engaged in S&T. Given that DSSR is envisaged as a holistic ethical relationship which is meant to channel the actions of individuals and organizations towards public good. Since, it is not a legal responsibility and only an ethical responsibility which does not create too onerous a burden, excluding private sector organizations and individual scientists will undermine the strength of this policy. Further since innovation systems require public-private partnerships, holding only some organizations and individuals responsible for the implementation of the policy creates a differential burden and may dilute and disincentivize partnerships between the public and the private sector.

- d) The DSSR identifies budgetary support and giving due weightage in performance based assessment system (PBAS) in case of knowledge institutions. By themselves these are inadequate, given that the predominant mode for recognition in the scientific community is via patents. Patents privilege individual achievements and innovation by providing monopoly rights to such individuals. Patents may not necessarily contribute to innovation, since as research shows working of patents are an important aspect that may be absent post the grant of patent rights. In such a scenario the DSSR should develop an alternative system of just 'deserts'. The focus should be on recognition and celebration of S&T contributing to public good through the creation and dispersal of socially useful innovation and enriching the knowledge commons. The DSSR should therefore design and implement an alternative system of incentives to patents (peer recognition, financial awards and citations) for the larger scientific community. The aim should be to expand and deepen knowledge commons which will allow for greater possibility for the generation to access socially useful innovations at a lower cost.
- e) The implementation and review process has been developed in a project mode wherein 10 man days for DSSR activities have been suggested. This is clearly inadequate, since the primary purpose of adopting the DSSR is to imbue and permeate all manner and mode of S&T besides refocusing the attention of scientific activities towards social goals. It is appreciated that organizations and individuals that have the obligation to undertake DSSR cannot outsource or sub-contract such activities. However, despite this expectation, if the DSSR is implemented in the project mode like in the case of CSR (Corporate Social Responsibility), there is a danger that the entire purpose of adopting such a policy will be undermined and only incentivize paper compliance.

### **III Comments on Specific Clauses**

- a) Paragraph 1 (Preamble): The reference to the principle of "giving back to the less endowed" which has been cited as a justification to DSSR should be reconsidered. The principal justification for adopting the DSSR is first to recognize that the scientific community is part of society and not as a privileged community. Therefore, as a responsible community within society,

- the scientific community should act in a manner that expands public good for the benefit of society at large. The DSSR should not be seen as equivalent to philanthropy by the privileged to the less privileged. Additionally, the DSSR should explicitly mention sustainable development goals or other substantive aspects of governance which can provide substantive direction.
- b) Paragraph 2 (Need for policy): This section should explicitly refer to constitutional goals like developing scientific temper, ending discrimination on the basis of caste, class, language and gender; universal education, dignity in employment, etc.
  - c) Paragraph 3 (Definitions): Clause 3.1.3. (Definition of Responsibility) needs to be rephrased so as to clearly state that this in the nature of an ethical obligation is not a legal obligation. However given that DSSR envisages mechanisms for ensuring accountability, this ethical responsibility should be coupled with accountability. Without accountability such an ethical obligation can be waived by legal entities obligated to undertake this responsibility.
  - d) Para 3 (Definitions): Clause 3.3. (definition of Knowledge institution) This should be redefined to include every individual and organization engaged in S&T in the country. Private sector should not be excluded. Individuals should undertake this ethical responsibility and institutions should be obligated to create conditions for fulfillment of this individual responsibility. Both individuals and organizations should be separately reviewed for the implementation of DSSR.
  - e) Paragraph 4 (Objectives): First, there has to be greater clarity on the social goals which DSSR is supposed to catalyze. More clarity is required in terms of what are these social goals: SDGs, Substantive goals mentioned in the TIFAC 2035 Vision Doc, etc. Second, procedural goals should also be specified. This may relate to rules of engagement in recognizing and rewarding DSSR activities. The manner and scope of assessment, review, and the terms of engagement between institutions, individuals and assessors. Third, constitutional goals need to be explicitly referenced in this part. Fourth, sharing of ideas and resources to catalyze DSSR should also be mentioned in terms of explicit recognition to the importance of access to common knowledge pool for the development of S&T. Creative commons license and other mechanisms which support this idea of knowledge commons should be adopted for DSSR rather than exclusively focus on patents to address just rewards for development of S&T.

- f) Paragraph 5 (Stakeholders): We suggest replacing acronym BIAS with an alternative that is semantically less revolting. The definition of beneficiaries hinges on this division between scientists and non-scientists (Re-givers and takers). This division is specious and not borne out in reality. Society as a whole including the scientific community benefits from a greater sense of social responsibility.
- g) Paragraph 6 (Policy Directives): Organizations implementing DSSR should be given flexibility to develop and implement a *sui generis* system of just rewards within the organization so as to incentivize DSSR. Organizations should be given enough latitude to develop protocols for enabling conformity with DSSR. The idea that DSSR should be limited to 10 person days is problematic as it reduces the idea of DSSR as a compliance target rather than an ethical code which should imbue all S&T development in India.
- h) Paragraph 8 (Implementation): Digital portal to capture social needs is required prima facie but it is unclear on the parameters of the input and output model. For instance, which entity will feed in data that captures social needs? The implementation of the digital portal seems difficult in practice. Ideally the DSSR should operate at the level of identifying areas of action and then leave it to organizations to develop, design and implement innovations which address these areas of action. Therefore, organizations and individuals should be provided with the flexibility to identify their own pathways to conform to the DSSR. At the formative stage this will also allow regulators to collect a wealth of information on diversity of pathways that have evolved within the scope of DSSR. Furthermore, the DSSR should clearly provide for linkages with other technology policies that govern scientific community in India.
- i) Paragraph 10 (Benefits): The DSSR explicitly refers to the upliftment of marginalized sections of society. This focus on deprivation and discrimination is required since as principles they are worthy guides to scientific research. However the principal focus should not be to identify beneficiary communities but to recognize that society in general is better off if it more equal and respectful of differences. The body which will oversee implementation of DSSR should include the widest possible representation from social groups and scientists both from private and public sector.

#### **IV Concluding Remarks**

The DSSR marks a break from the earlier technology policy documents issued by the Government of India. It aims at transforming the social contract between science and society by developing a robust ethical code of conduct. This will regulate the activities of individual scientists and organizations with the aim of providing them with a framework for undertaking concrete steps towards the social good. For such an ambitious policy to succeed, no entity should be excluded from the DSSR. Substantive goals and procedural rules of engagement need to be mentioned explicitly. Finally, the DSSR provides an opportune moment to revisit the structure of just rewards within scientific community.