State Control versus Individual or Common Property Rights: The Most Sustainable and Efficient Use of the Natural Resources in Context

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Abstract: Human beings are blessed with different kinds of natural resources, appropriate use of which can give us enormous convenience. At the same time, unsustainable uses can turn them into curse for us. Additionally, limited nature of natural resources is a strong push to ensure sustainable use of them so that human beings can be benefited for long time. In line with this need, there is a continuous debate about who can ensure the most sustainable and efficient uses of natural resources, state control or other alternatives (such as individual or common property rights). This essay attempts to resolve the debate by examining to what extent each approach is successful in ensuring sustainable use of natural resources along with their limitations. In so doing, the way of exploration and exploitation of some resources (such as water, air, and land) by different stakeholders has been specifically focused on. Finally, this essay concludes that each approach has both success and constraints, while state alone in some cases can better ensure sustainable and efficient use of resources by eliminating its constraints, and in other cases, a combined control is required.

Keywords: Common property, environmental sustainability, individual property rights, natural resources, public trust doctrine, and state control.

1. Introduction

Natural resources, for their fundamental significance, always remain in the centre of domestic and international concern. In fact, because of their contribution towards economic development, every stakeholder is resolute to ensure maximum use of both renewable and non-renewable natural resources. Consequently, stakeholders sometimes even do not hesitate to ignore scarcity of those resources. Therefore, sustainable use and management of natural resources is a crucial issue. Unfortunately, the idea of sustainable use was not strongly linked with the concepts of private property rights and common property rights over natural resources, which are nothing new rather originated during Roman empire.¹ After 1972 Stockholm conference, international community for the first time realised the importance of ensuring sustainable development that includes

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Patricia Kameri-Mbote, 'The Use of the Public Trust Doctrine in Environmental Law' (2007) 3/2 Law Environment and Development Journal 195, 197-200.

sustainable use of natural resources to ascertain long-term benefit. Since then, the question of best way that can ensure sustainable and effective use of these resources has gained significant importance. The urgency and importance of ensuring sustainable management and efficient use of natural resources have also been emphasized under the United Nations Sustainable Development Goals.² In line with this need, some proponents argued on behalf of state control, while others emphasized on individual or common property rights. This essay analyses the contentions including the possibilities and limitations to reach a conclusion whether state control compared to individual or common property rights can better ensure sustainable use of natural resources. To this end, it examines how natural resources (such as air, water, and land) are controlled, managed, explored, and exploited under different stakeholders.

2. State control over natural resources

Under international law, states are entitled to exercise sovereign rights over natural resources within their territory, where no other state can access to explore those resources.³ Additionally, every state confirms its ownership both above and below the surface by law of the country. And, state is supposed to explore and exploit natural resources for the greatest prosperity of people and country. The United Nations General Assembly holds that the rights of peoples and nations to permanent sovereignty over national natural resources must be exercised in the interest of their national development and for wellbeing of the people of state concerned.⁴ To this purpose, states still exercise control while contracting with different companies in order to extract and use these resources. Thereby, domestic economic interest is served well by state's eminent power over national natural resources.

However, question of sustainable use of natural resources by states becomes a vital one especially in case of resources, which do not fall under national sovereignty rather under 'common concern of humankind' or 'common heritage of humankind' or 'shared resources', such as high-seas, biodiversity, watercourses, migratory species, etc. These resources cause conflict between sovereign states because aftereffects of their unsustainable uses do not maintain any territorial limitation.⁵ To mitigate the conflict, prevent environmental

² United Nations, 'Transforming Our World: The 2030 Agenda for Sustainable Development' (adopted 25 September 2015) UN Doc A/RES/70/1 (UNSDGs), goal 12.

³ Rio Declaration on Environment and Development (adopted 14 June 1992) UN Doc A/CONF.151/26, principle 2; United Nations Conference on the Human Environment, UNGA Res 2994 (adopted 15 December 1972) UN Doc A/RES/2994 (Stockholm Conference), principle 21.

⁴ United Nations General Assembly Resolution 1803 (XVII) (14 December 1962).

Ouoted in Philippe Sands and Jacqueline Peel, Principles of International Environmental Law (3rd edn, CUP 2012) 12 (as cited in Virginie Barral, 'National Sovereignty over Natural Resources: Environmental Challenges and Sustainable Development' in Elisa Morgera and Kati Kulovesi

damage, and ensure sustainable conservation and use of natural resources, some governing principles practiced in international forum are incorporated in natural resource related legal instruments. These international legal instruments ask and sometimes compel states to respect others in using their own as well as common resources. For example, principle 2 and 21 respectively of Rio Declaration and Stockholm Conference though recognise states' sovereign right to exploit own resources, emphasize on states' obligations not to cause damage to the environment of other states or of areas fall out of national sovereignty.6 Therefore, it prioritise sustainable use of natural resources over the idea of sovereignty for the common good of nature and human being. In this regard, Barrel rightly opined that "the principle of permanent sovereignty over natural resources should include a duty of environmental protection, and thus sustainable use would be an integral element of the exercise of national sovereignty."7 Thus, state can ensure sustainable use of common resources and shared property by taking appropriate measures under international cooperation.

In regard of sustainable use of natural resources, the case of 'air' seeks special consideration over which stakeholders are fighting each other to establish their rights and exploit it. Specifically, privatisation and commercialisation of air is now an emerging issue around the world. For example, My Baggage (a British luggage shipping company) is currently selling bottles of "authentic" air from England, Scotland, Wales, and Northern Ireland to provide UK residents overseas with the scent of home.⁸ Even before My Baggage, some other companies (such as Aethaer, Swissbreeze) have been selling air.⁹ Such air commodification seems to be a central push to national and international authorities for mitigating air pollution, specially caused by large-scale industries. To maintain quality of air, many states apply 'command and control environmental regulation'.¹⁰ However, many proponents argued that market-

⁽eds), Research Handbook on International Law and Natural Resources (Edward Elgar Publications 2016) 4).

⁶ See Rio Declaration (n 3) and Stockholm Conference (n 3).

⁷ Barral (n 5) 4.

⁸ Tamara Hardingham-Gill, 'UK Company Launches \$30 Bottled Air Range for Homesick Expats' CNN (22 December 2020) https://edition.cnn.com/travel/article/uk-company-launches-30-bottled-air/index.html accessed 25 December 2020.

⁹ ibid.

The use of Command and Control in regulation involves the government or similar body to "command" the reduction of pollution (e.g., setting emissions levels) levels and to "control" the manner in which it is achieved (e.g., by installing pollution-control technologies). This approach differs from other regulatory techniques, e.g., the use of economic incentives, which frequently includes the use of taxes and subsidies as incentives for compliance. For details, please see Bonosree Rani and ANM Wahid, 'Accommodating Sustainable Development Policy in Business Regulations of Bangladesh' [2020] Journal of Business Studies 1, 11. Also, see K. S. Coplan, 'Public

based environment regulations, such as effluent taxes or emissions trading scheme are more effective in mitigating air pollution and maintaining air quality. Though the command and control regulation is being criticised in terms of its efficiency, Cole and Grossman showed that it rather can be more efficient and effective than market-based mechanisms for environmental protection, especially in those cases, where high monitoring cost is involved.¹¹ Besides, in case of market-based mechanisms, there is a strong argument that carbon traders first hold a temporary property rights over air pollution, which can later turn into permanent one at any time.¹² Additionally, the government has a growing pressure from pollution traders to increase the limit of cap¹³ that might be uncontrollable if traders once can establish their permanent rights over it. Ultimately, it would severely decrease air quality and cause environmental damage. Even in some cases, applying 'cap and trade'14 regulation has severely caused carbon emission increase. For instance, a report shows that carbon emissions from California's oil and gas industry rose 3.5% once cap and trade began.¹⁵ However, market mechanisms can also be effective where monitoring cost is comparatively low.¹⁶ Therefore, in question of sustainable management of air, Cole and Grossman's view that both these mechanisms can run simultaneously seems quite reasonable. This is because every case is different and required to be solved differently. And, choice of mechanism should be made based on cost and benefit analysis of each case.

It is contested that state's eminent power over natural resources impedes people from accessing the resources, specifically access to the land-based

Trust Limits on Greenhouse Gas Trading Schemes: A Sustainable Middle Ground?' (2009) 35(2) Columbia Journal of Environmental Law 287.

Daniel H. Cole and Peter Z. Grossman, 'When Is Command-And-Control Efficient? Institutions, Technology, and the Comparative Efficiency of Alternative Regulatory Regimes for Environmental Protection' [1999] Wisconsin Law Review 887.

¹² Larry Lohmann, 'Carbon Trading: A Critical Conversation on Climate Change, Privatisation and Power' [2006] Development Dialogue No. 48.

¹³ Cole and Grossman (n 11).

¹⁴ Cap and trade is an approach that is designed to limit, or cap, the total level of emissions of certain chemicals, particularly carbon dioxide emerged from industrial activities. Under this approach, A legislature puts a "cap," or ceiling, on emissions, which is lowered each year in alignment with the program's structure to reach pollution-reduction goals. The "trade" part of the equation relates to the development of markets in which program participants reduce their emissions and sell unused permits to other participants. For details, see Rani and Wahid (n 10) 11. Also, see Alan Murray, 'Why Key Executives are Warming to Legislation on Climate Change' *The Wall Street Journal* (7 February 2007) https://www.wsj.com/articles/SB117080756478000233 accessed 30 March 2021.

Lisa Song, 'Cap and Trade Is Supposed to Solve Climate Change, but Oil and Gas Company Emissions Are Up' *ProPublica* (USA 15 November 2019) https://www.propublica.org/article/cap-and-trade-is-supposed-to-solve-climate-change-but-oil-and-gas-company-emissions-are-up accessed 28 December 2020.

¹⁶ ibid.

resources via the state's power of land acquisition. This allegation would not arise if it always happened for greater benefit of the people maintaining a balance among environmental issue, land rights of the public, and sustainable use of land resources. But in practice, especially in Global South, states frequently appropriate private or community properties and allocate them to some private entities (companies or industries) prioritising economic benefit over environmental crisis thereof. For example, in Delhi, government evicted slum dwellers and used their lands for commercial and infrastructural purposes where 'environmentalism of the poor' was totally ignored.¹⁷ Even using wider meaning of "public purpose", Indian government now can acquire agricultural lands for private companies if the later want to build infrastructure.¹⁸ In USA as well, Supreme Court ruled on behalf of land appropriation for economic development even when the said development corporation was a private entity.¹⁹ What is clear from these examples is that states broadly define the 'public purpose' to acquire private lands in guise of economic development, but in reality they consider short-term political gains denying long-term deterioration of environment.²⁰ States, thereby, change the way of using land that has potential impact on other factors, such as climate change, soils, flora and fauna, etc. Hence, state provided rehabilitation or compensation to displaced land owners is regarded a partsolution to a mass problem²¹ because issue of environmental crisis and land degradation still remain unaddressed. To mitigate these circumstances, application of Public Trust Doctrine (PTD) may efficiently prevent governments from illegal conveying public resources (especially those which are inherently public) to private enterprises and guarantee the public access to natural resources after legal and necessary appropriation.²² The High Court of Kenya explained PTD by stating that:

state, as trustee, is under a fiduciary duty to deal with the trust property, being the common natural resources, in a manner that is in the interests of the general public and it should maintain a proper balance between the economic benefits of development with the needs of a clean environment.²³

¹⁷ Amita Baviskar, 'The Politics of the City' [2002] Journal of Germanic Studies 516 https://eprints.soas.ac.uk/17278/1/2002/516/516%20amita%20baviskar.htm accessed 23 December 2020.

¹⁸ Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013 (Act No. XXX of 2013).

¹⁹ Kelo v New London [2005] 545 U.S. 469.

²⁰ Dhanmanjiri Sathe, 'Land Acquisition Act and the Ordinance: Some Issues' (2015) 26 & 27 Economic & Political Weekly 90.

²¹ Usha Ramanathan, 'A Word on Eminent Domain' [2009] International Environmental Law Research Centre 133, 139-142.

²² Kameri-Mbote (n 1).

²³ Peter Waweru v The Republic of Kenya, Misc. Civil Application No. 118 (2004).

Application of PTD in natural resource management has been emphasised in India also.²⁴ However, questions still remain in determining public interest and maintaining a balance between public need and sustainable management of land resources. Therefore, besides PTD, states need to focus on other technical issues like developing green technology and enhancing capacity to use them appropriately so that sustainability of land resources can be ensured. Furthermore, sustainable use of land should be prioritised in land acquisition laws. Otherwise, it may push for increasing and stronger role of individual people as well as private sector and other non-state actors in sustainable and equitable management of resources.

3. Individual property rights

Extensive support for individual property rights came from great philosophers like Aristotle, St Thomas Aquinas, etc. Since the period of their writings, individual property rights have prioritised the development of human potential and virtue over ensuring sustainable use of natural resources.²⁵ Therefore, state authorities sometimes need to ignore individuals' rights and their access to natural resources for the sake of 'efficient and sustainable management' of resources. Besides the concept of sustainable development, Ezirigwe also identified human rights considerations, public participation, and corporate responsibility for curtailment and limitation in the property rights to natural resources development.²⁶

It is incontestably true that sustainable use of natural resources cannot be entirely ensured without giving possession of the property to the people at least in some cases. Without tittle over property, people naturally would be conscious only about their apparent interest, neither of others nor of environment. But, every individual is required to respond to environmental crisis. In this regard, Hudson strongly opined that individual obligations already inherently exist in private property rights in the name of 'social obligations', violation of which attracts a remedy under tort law, and such inherent existence only needs to be explicitly recognised.²⁷ However, the tort system cannot serve the purpose well because of its case to case approach and inability to resolve disputes where information is limited.²⁸ As an alternative to tort system, Hudson prescribed 'two-way street' theory and referred to German Constitutional provision for

²⁴ M. I. Builders Pvt Ltd v Radhey Shyam Sahu [1999] AIR (SC) 2468.

²⁵ Ben France-Hudson, 'Surprisingly Social: Private Property and Environmental Management' (2017) 29 Journal of Environmental Law 101, 110.

²⁶ Jane Ezirigwe, 'Human Rights and Property Rights in Natural Resources Development' (2017) 35 Journal of Energy & Natural Resources Law 201, 202, 212.

²⁷ France-Hudson (n 25) 127.

²⁸ Marcia R. Gelpe, 'Organizing Themes of Environmental Law' (1990) 16 William Mitchell Law Review 897, 899.

instance.²⁹ Under this theory, failure of positive obligations imposed on property owners to benefit community justifies state intervention to change the parameters of ownership.³⁰

However, the most serious concern regarding private property rights is that 'individual interest' gets preference over common good, and thus obligations towards others cannot be appropriately attributed to individual property holders. Moreover, individual property may be used inappropriately or even underused. Consequently, this right more or less causes environmental degradation in some ways and hinder sustainable use of resources. As Hardin claims that "our particular concept of private property, which deters us from exhausting the positive resources of the earth, favours pollution."³¹

Moreover, in case of some natural resources like water, energy etc., common people themselves do not want these to be privatised. For instance, due to poor service, high prices, and generous pay-outs to shareholders, 83 percent of respondents of the frontrunner country in privatisation (the United Kingdom) favoured the nationalisation of water, and it was 77 percent for energy.³² The success and failure of individual property rights in maintaining sustainability of resources can be better analysed by examining water management under current legal framework.

In recent times, privatisation and commercialisation of water has become a controversial and emotive topic, which asks for private entities' or/and individual's ownership over this resource. The policy of commercialising water was reflected in the Dublin Statement 1992 though it did recognise the basic right of all human beings to have access to clean water and sanitation.³³ However, the Dublin Statement was highly contested by NGOs and human rights activists because of making water an economic good for the sake of achieving efficient and equitable use. Therefore, in 2002, the United Nations Committee recognising water as a public good, a limited natural resource, and a human right as well, requires state parties to protect water.³⁴ And, many countries have already

30 Basic Law for the Federal Republic of Germany 1949, art 14.

²⁹ France-Hudson (n 25) 114.

³¹ Garrett Hardin, 'The Tragedy of the Commons' (2009) 1 Journal of Natural Resources Policy Research 243, 247.

³² Jonathan Ford and Gill Plimmer, 'Pioneering Britain has a Rethink on Privatisation' *Financial Times* (22 January 2018) https://www.ft.com/content/b7e28a58-f7ba-11e7-88f7-5465a6ce1a00 accessed 22 December 2020.

³³ Dublin Statement on Water and Sustainable Development 1992, principle 4.

³⁴ Committee on Economic, Social and Cultural Rights Holds Discussion on Right to Water, UN General Comment No. 15 (25 November 2002) Press Release HR/4630.

recognised water as a human right by their supreme law.35 However, the rationales behind water privatisation and commercialisation are some specific constraints of state-based water service such as poor management, failure to ensure sustainable use of water, negligence towards scarcity of water, reluctance to subsidise infrastructure development, etc.36 Besides, politics of strong branding and powerful marketing campaigns combinedly influence the emergence and sustenance of new bottled water markets.³⁷ Thereby, a free good after packaging did become a luxury one.38 At the end, all these things made water a highly contentious political issue.³⁹ However, accepting all the limitations of state control over water service even cannot entirely justify privatisation or commercialisation of water. To whatever extent these contentions address diverse problems of state-based water service such as economic, social, and environmental, the dominant feature behind it is commodification for profit gaining. Swyngedouw appropriately demonstrated how profit-centred actors (water companies) can be driven by the inherent factors to private market economy, such as takeovers, disinvestments, class conflict, corrupt practice, inefficient operations, political risk, etc.⁴⁰ In fact, uncertainties and liquidities of privatisation question long-term sustainability of market-based water supply systems.⁴¹ For instance, Coca-cola had to withdraw its new Dasani product (the biggest-selling bottled water brand in the UK) from UK shops after knowing that the drink was found to contain levels of bromate- a substance linked with an increased cancer risk.⁴² In the question of commercialisation of water, Bakker mentioning it as an 'adaptive and transformative' process concluded that water is an 'uncooperative commodity' and it is difficult to commercialise.⁴³ Even if it is possible to efficiently commoditise water and supply it according to demand, undoubtedly some people would make profit out of this natural resource when everyone is entitled to have access to it as human right. Whereas, many people around the world are

³⁵ As of 2020, Democratic Republic of Congo, Egypt, Kenya, Morocco, Niger, Somalia, South Africa, Tunisia, Bolivia, Ecuador, Maldives, Fiji and so on have recognized water as human right under their Constitutions.

³⁶ Karen J. Bakker, An Uncooperative Commodity: Privatizing Water in England and Wales (Oxford Geographical and Environmental Studies Series, OUP 2004).

³⁷ Raul Pacheco-Vega, '(Re)theorizing the Politics of Bottled Water: Water Insecurity in the Context of Weak Regulatory Regimes' (2019) 11(4) Water 658.

³⁸ Toby McCasker, 'Turning Water into Wine: Hoe Did Simple H20 become a Luxury Commodity?' *The Guardian* (2 January 2019) https://www.theguardian.com/culture/2019/jan/02/turning-water-into-wine-how-did-simple-h2o-become-a-luxury-commodity accessed 31 December 2020.

³⁹ ibid.

⁴⁰ Erik Swyngedouw, 'Dispossessing H2O: The Contested Terrain of Water Privatization' (2005) 16 Capitalism Nature Socialism 81, 96.

⁴¹ ibid

⁴² George Wright, 'Coca-cola Withdraws Bottled Water from the UK' *The Guardian* (19 March 2004) https://www.theguardian.com/uk/2004/mar/19/foodanddrink accessed 29 December 2020.

⁴³ Bakker (n 36).

not even getting pure drinking water. Though privatisation or corporatisation of water or any limited resource may be proved effective in some regards like strong and efficient management, it neither can guarantee of removing all the limitations of state control nor ensure its sustainable use. Because their main concern is neither sustainable management nor equitable distribution of resources but making profit out of that. State rather can effectively eliminate its drawbacks by adopting appropriate management system recognising water as universal need, which requires that water be used sustainably for the greater benefit of humankind. The significance of recognising water as universal need for ensuring its sustainable use can be understood from Hiskes' reading, where he showed how even a golf course (that uses a huge quantity of water) of any specific country can affect right to water of others living in other parts of the world.⁴⁴

4. Common property rights

With the growing concerns of both state control and individual property rights, large-scale public participation and common property rights have gained special focus in natural resource literature. Common property or community rights refer to the rights of a group of users over common property resources (such as common lands, wildlife, fisheries, forests, pastures, protected areas, etc.), not necessarily of a specific clan or ethnic community. Idea of common property rights specifically emphasised on peoples' voices and communities' participation in decision making processes for natural resource conservation. The issue of public participation has been stated in principle 10 of Rio Declaration which asks for citizens' access to information and justice concerning environment and opportunity to participate in decision-making processes.⁴⁵ Later, Arhus Convention advocated for citizen's right to involvement in environmental governance.46 One of the strongest rationales of common property rights and communities' participation in policy decision is that environment, nature, and natural resources in question can be well conserved by applying communities' traditional knowledge. Moreover, participation in the decision-making process creates a sense of 'ownership' in the decision itself,47 that helps encouraging

⁴⁴ Richard P. Hiskes, 'Missing the Green: Golf Course Ecology, Environmental Justice, and Local "Fulfillment" of the Human Right to Water' (2010) 32 Human Rights Quarterly 326.

⁴⁵ Rio Declaration (n 3) Principle 10.

⁴⁶ UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (adopted 25 June 1998, entered into force 30 October 2001) 2161 UNTS 447, arts 4-9.

⁴⁷ Patricia Kameri-Mbote and others, Ours by Right: Law, Politics and Realities of Community Property in Kenya (Strathmore University Press 2013) 18.

sustainable use of natural resources.⁴⁸ Otherwise, communities may use resources destructively if they are not involved in resource management. Emphasising on community participation, Razzaque rightly stated that:

if they are provided with adequate technical and institutional support, their participation can help achieving better quality environmental decision and can also offer a high-quality natural resource management for the country.⁴⁹

Many scholars have shown common property rights as sustainable alternative to state and private management of resources.⁵⁰ Among them, Hardin did not entirely support common property rights. He rather described tragedy of the common in the sense of 'open access' that results in inefficient overuse of, and suboptimal investment in, the resource.⁵¹ Hardin rightly exemplified the oceans of the world, which continue to suffer from the survival of the philosophy of the commons,⁵² because every state has open access to the oceans. How open access to a common property inconsiderately exploit natural resources and cause environmental damage can be easily comprehended from present condition of the Mount Everest. Recent reports reveal that the slopes are littered with discarded empty oxygen canisters, abandoned tents, food containers, and even human faeces trashing the natural environment.⁵³ Even, micro-plastic pollution has been discovered in snow close to the peak of Mount Everest.⁵⁴ In a word, "freedom in a commons brings ruin to all."55 Therefore, Ezirigwe argued that Hardin's concept of the 'tragedy of commons' has justified state control over natural resources.⁵⁶ But this 'freedom in common' or 'open access' is entirely different from 'common property rights' or 'public/community participation'. Under the theory of 'common property rights' property can be kept under state control so as to ensure a balanced, equitable, and environment-friendly access of common people through strategies and legal instruments.

⁴⁸ Elizabeth Ashamu, 'Centre for Minority Rights Development (Kenya) and Minority Rights Group International on Behalf of Endorois Welfare Council v Kenya: A Landmark Decision from the African Commission' (2011) 55 Journal of African Law 300.

⁴⁹ Jona Razzaque, 'Participatory Rights in Natural Resource Management: The Role of Communities in South Asia' in Jonas Ebbesson and Phoebe Okowa (eds), Environmental Law and Justice in Context (CUP 2009) 123, 133.

⁵⁰ Arun Agrawal and Clark C. Gibson, 'Enchantment and Disenchantment: The Role of Community in Natural Resource Conservation' (1999) 27 World Development Journal 629.

⁵¹ Hardin (n 31).

⁵² ibid.

National Geographic Society, 'Trash and Overcrowding at the Top of the World' National Geographic Society (USA 1 October 2019) https://www.nationalgeographic.org/article/trash-and-overcrowding-top-world accessed 20 December 2020.

⁵⁴ Damian Carrington, 'Microplastic Pollution Found near Summit of Mount Everest' *The Guardian* (20 November 2020) https://www.theguardian.com/environment/2020/nov/20/microplastic-pollution-found-near-summit-of-mount-everest accessed 20 December 2020.

⁵⁵ Hardin (n 31) 246.

⁵⁶ Ezirigwe (n 26) 206.

However, common property rights may create conflicts between different cultures and communities, which is difficult to be dealt with. Because they utterly depend on those resources and everyone desires to establish rights over and secure access to resources. They also significantly lack scientific knowledge that may sometimes cause environmental damage. Additionally, internal conflict may arise in the question of 'who will lead the community to the institutional level'. Consequently, it may lead people to use natural resources unsustainably. Besides, it is difficult to materialize community participation in field level so efficiently as it can be recognised theoretically or legally. In some cases, it lamentably failed to ensure communities' participation in real sense even after combined patronisation of states, human rights advocates, and environment conservation activists. For instance, the idea of Community-Based Natural Resource Management (CBNRM) failed to ensure community participation and became more like other neoliberal market-based solutions strengthening interests of the state though CBNRM was developed to foster relationships among different stakeholders.⁵⁷ Also, in India, Water User Association (WUA) was formed for sustainable water management under the principle of participatory irrigation management through representation of marginalised people in executive level.58 But after few years, it was revealed that WUA severely failed to fulfil its main purpose of engaging community in policy making for sustainable use of water because they were kept grossly under-represented in the highest position.59

5. Conclusion

Therefore, it cannot be generalised that one single approach is best to ensure sustainable end effective use of natural resources in all cases. It rather can be said that one way is better than other in a specific case. For instance, resources under common concern or shared property are possible to be explored and exploited sustainably by states through properly implementing international legal instruments made in this regard. If individual rights or open access is given here, it will create a haphazard situation, as everyone will then use them without even thinking about sustainability of these resources. With regards to water, state can ensure sustainable use better than others. Herein, absolute private or common property rights can never be a better alternative. However, some cases demand for combination of state control and other alternative ways. For example, in case of air and land, private rights under direct state control by regulations can be

⁵⁷ Wolfram Dressler and others, 'From Hope to Crisis and Back Again? A Critical History of the Global CBNRM Narrative' (2010) 37 Environmental Conservation Journal 5.

⁵⁸ V. Ratna Reddy and Pulluru Prudhvikar Reddy, 'How Participatory Is Participatory Irrigation Management? Water Users' Associations in Andhra Pradesh' (2006) 40 Economic and Political Weekly 5587, 5588.

⁵⁹ ibid.

proved more sustainable. However, in land regulations- specifically in acquisition law- a balance between legitimate aim and public need should be strictly maintained. Again, common property rights alone may fail to utilise resources sustainably because of their internal and external conflict and unscientific system as well. Nonetheless, common property rights with appropriate regulatory support from state and other concerned authorities can play their role significantly. It may be called a 'giving and taking' process, where communities should be provided with technical and non-technical support and in exchange other stakeholders will take ideas and experiences from communities to use and conserve natural resources. Though to some extent private or common property rights can serve the interest of sustainability in certain cases, they can do so better if accompanied by state control. Therefore, the state control for management of every natural resource is a must to the best extent possible.