



Not Another Nexus? Critical Thinking on the New Security Convergence in Energy, Food, Climate and Water

Shilpi Srivastava and Lyla Mehta

Nexus and Security

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In recent years, the notion of the nexus has gained immense traction in the domain of natural resource governance. It has captured high interest across academic, policy and popular debates, and has become the defining vocabulary to understand the interlinkages between land, water, food and climate. Driven by the alarmist rhetoric of uncertainty and scarcity, the nexus thinking is often couched in the language of security. This paper focuses on critical perspectives on the securitization of water, land, food, energy and climate change debates and the implications of the nexus for policy making and natural resources management.

What are the drivers of this nexus re-thinking? Who is driving this debate of the nexus and to what ends? What do these debates tell us about the character of the development 'industry' and the political, ideological and institutional logics operating within it? What are the challenges of this nexus formulation, what spaces may open up for addressing issues of equality and justice? In October 2012, the STEPS Centre and SOAS organised a colloquium that set out to explore and address some of these questions. This paper draws on the critical insights from this meeting and explores some of the fundamental ways to unpack the nexus formulation and address the challenges therein.

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Acronymns

ESI	Earth Security Initiative
IPCC	Intergovernmental Panel on Climate Change
IWRM	Integrated Water Resources Management
MDG	Millennium Development Goals
NGO	Non Government Organisations
UN	United Nations
US	United States
WEF	World Economic Forum

1 Introduction

In recent years, the notion of the nexus has gained immense traction in the domain of natural resource governance. It has become the defining vocabulary to understand the interlinkages between land, water, food and climate. Ever since the 2008 World Economic Forum, which pushed key players to, 'thinking about water and its interlinkages across [a] nexus of issues' (World Economic Forum 2011), the nexus has become a strong policy metaphor to address the 'world in crises',¹ placing water at the centre of the debate. The 'nexus' has also brought in new players such as global corporations, who are now taking a keen interest in addressing water, climate change and energy risks. Driven by narratives of scarcity and uncertainty (Allouche *et al.* 2014), the language of nexus is increasingly framed in the language of security.

As a powerful political concept, security is often associated with alarmist rhetoric, which helps to attract the attention of Non Government Organisations and international players but may ultimately have depoliticising effects. Then, what does it mean to securitise water, food, energy and the climate? Is this securitisation enhancing local people's wellbeing and rights or is it allowing new actors to increase processes of enclosure and commodification of existing limited natural resources? Is securitisation ultimately reducing or increasing the insecurities of poor and marginalised people?

In this sense, using security to operationalise the nexus may have wide ranging impacts. This also raises questions about the nexus as an effective way to address issues of equity, local resource rights and justice. Against this backdrop, this paper focuses on critical perspectives on the securitisation of water, land, food, energy and climate change debates and the implications of the nexus for policy making and natural resources management.² It raises the following questions:

- What are the drivers of this nexus re-thinking?
- Who is driving this debate of the nexus and to what ends?
- What do these debates tell us about the character of the development 'industry' and the political, ideological and institutional logics operating within it?
- What are the challenges of this nexus formulation, what spaces may open up for addressing issues of equality and justice?

¹ The opening remarks made by the United Nations Secretary General, Ban-Ki Moon to the session of the World Economic Forum Water Initiative in Davos, January 2009 (World Economic Forum 2011).

² This paper draws on the discussions at the colloquium, *Not Another Nexus: Critical Thinking on the New Security Convergence in Energy, Food, Climate and Water*, organised by SOAS and STEPS Centre/IDS in October 2012. For details of the event, see <http://steps-centre.org/2012/project-related/the-new-security-agenda-in-water-energy-and-food/>.

2 Securitising the nexus

Before the 1990s, the term 'security' was primarily associated with the political and military dimensions of national security. It is only in the context of the changed landscape of international relations in the post-Cold War period that a large number of 'non-traditional security challenges' emerged. In this way, the 1994 UNDP report on 'human security' marked a qualitative change in the understanding of 'security' (United Nations Development Programme 1994). It vastly expanded the scope of the concept, and moved away from state-centric orthodoxy, to the extent that – according to some – there is no longer any clear difference between the notions of (human) security and (human) development (Allouche *et al.* 2011).

The environmental security agenda made links between resource scarcity, climate change and conflict emerged at the end of the Cold War. These turn-of-the-century debates came alongside a resurgence of conventional security agendas linked to the global war on terror. To this existing conceptual minefield now comes the nexus between food, energy and water security. While the term 'security' has undergone certain discursive shifts, these shifts are also very visible in the water sector where the discourse seems to be shifting from the Integrated Water Resources Management (IWRM)³, which was the sanctioned discourse of the first decade of this millennium, to concepts such as water security, and now the nexus. Therefore what fresh perspectives, if any, does the nexus bring to the already existing concepts in natural resources governance and management?

Therefore this paper asks: what are the discourses that emerge through security and nexus talk and how should one understand this discursive shift? Does it actually help addressing issues of natural resource management through the language of security and the nexus? Where are the local people and everyday practices of natural resources management in this nexus formulation? Does the nexus indicate shifting up scales to the international, or sidelining the very localness of the resource?

To start with, there are three ways to read the emergence of the nexus as the new development vocabulary. First, a *cynical reading* makes it a mere relabeling exercise in the development industry and the post-millennium development goals (MDG) vocabulary. Second, a more *progressive reading* sketches the nexus as a learning process, whereby we are finally stepping out of the water box and seeing things in the broader perspective of natural resources management. Third, an *exploratory reading* situates the idea of the nexus in the backdrop of neoliberalism, as a simultaneous discursive, cultural, political and economic shift. For some people then, the nexus has become a discursive dislocation of politics to other scales such as the global level, and to other domains and actors such as large corporations. It signifies a political shift that emphasises certain forms of regulation and is a stepping stone to a larger role of corporate governance in global environmental governance. It may also signal an economic shift towards the greater goal of commodification of natural resources⁴ with a larger role for markets.

³ IWRM is defined as 'a process which promotes the coordinated development and management of water, land, and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems'. (Global Water Partnership 2000)

⁴ Based on the introductory remarks made by Peter P. Mollinga at the 2012 Colloquium.

3 'Framing' nexus: for whom and to what ends?⁵

It is important to unpack how the nexus discourse is 'framed' since it could privilege certain kinds of outcomes over others. The nexus is a way to entice influential actors such as large corporations through a security agenda. It is for these actors that the nexus is new thinking because the truth of 'everything is connected to everything' is an old and well established fact. So, if one chooses to use nexus instead of IWRM and security instead of justice, it matters because it sets the momentum for policy processes that have an unprecedented impact which is often not measured. Through 'mis-framing' the debate in the language of security or nexus, there is a danger in closing a number of possible and creative ways forward. Foremost among these is losing the human security lens that provides useful ways to understand and address vulnerability. This lens focuses on the individual and helps to decentre the state as the primary actor. In displacing this lens through the nexus language, some significant questions such as, *whose environmental insecurity and environmental justice?*, are often sidelined.

If one frames water security alongside hard power issues such as terrorism or nuclear annihilation, then one is opening the door to a set of actors, the states and issues that one would not want to securitise. It is a mistake to frame our water problems in this manner. In this process of following a security/scarcity pathway, there is a danger of losing four things. First, what should be a social project becomes a national security issue and high level actors are involved. The impact of this should not be underplayed. Second, the provision of a public good becomes a privatised delivery and leads to resource capture. Third, collective problems get domesticated as they are parcelled out to states and agendas of good governance. Fourth, we lose a plurality of lenses to see water in creative ways.

We need to be cautious of the security language. If our point of departure accepts the primacy of states and the preservation of the *status quo*, i.e. securing 'our' environment relative to changing resource endowments in a capitalist neoliberal world, then we are accepting a world in constant crisis. Ironically, the 'security nexus' framings ensure that the people who are most vulnerable and most in need of 'water security' will be least able to participate in an expert-driven scarcity and security dialogue. When powerful actors come in and make calculations about 'who has what?' we get scenarios and models, famines, transitions, narratives of resource wars and water wars, and most importantly we get a crowding out of other actors, ideas and ways of understanding what are really social issues of access and rights and not national security problems.

⁵ This section draws on the presentation made by Larry Swatuk at the 2012 Colloquium, 'A nexus for whom? Water resources, social justice and environmental security', see <https://www.youtube.com/watch?v=pF2TSy-Bk6w&noredirect=1>

4 Securitising the environmental discourse: constructs and implications⁶

What are the potential connections between environmental discourses and the use of the security jargon? How are securitised discourses constructed in international negotiations and how water and/or environment issues are couched in the language of security to gain political leverage? There are three different rationales for connecting the environment and the security narratives. The first and the most basic one is that of an environmental event of either scarcity or abundance, which triggers conflict and then escalates into a security issue. The second rationale relates to the environmental footprint of security measures that could have an environmental impact, which can trigger scarcity and then the same causality of scarcity leading to security could be applied. The third rationale connects environmental events such as droughts or flood to collective action among countries, which leads to peace building measures, also a dimension of security. In this case, the environment becomes a platform for peace building. The resources likely to be securitised are food, energy, water and land and the degree of securitisation extends from securing reliable supply, as in the case of energy, water, and food, to health, entitlements and values.

There are two component attributes that can make a decision a securitised one: a linguistic attribute, and an institutional attribute. These have different components, such as discourse or issue framing and water centrality, which come under the linguistic component, and rule-observance, transparency, efficiency and equity considerations which come under the institutional component. The evidence gathered from a research study suggested that, though water is used as a medium for securitisation, it invariably serves the means of traditional security. The reason for this could be due to obsolete institutions that are accustomed to traditional security measures. Though these institutions now need to reframe their activities, they continue to use the language of security. The second potential reason could be due to general fear of political instability. However, in majority of cases, the rationale for securitising decisions is not based on a cost-benefit analysis, but on a sense of urgency.

Though using the language of security may put the environment at the centre of the agenda, it can also lead to competing securities, which may then create a deadlock. For example, land can be allocated for nature conservation, food production, solar farming or other uses. The actors may try to use the language of security to gain an edge in the discussions. But what value should be prioritised first, nature conservation over food production or vice-versa and who will make these judgments? Thus, securitisation may deflect the attention from the more proximate environmental causes and lead to perpetuation of inequalities of participation and decision-making between those who manage to voice their concerns and those who cannot. There are six generic questions, which act as indicators to recognise a securitised discourse. What resources are we securitising: issues of supply, food security, land ownership? Who is securitising the environmental discourse: state/ non state? How are we securitising the resource? What are the linguistic and institutional tools? What variables trigger a securitised discourse and what are the implications of this securitisation? And how can we reconcile competing securities? In majority of cases, security is used as *buzzword* to gain attention though that does not imply that securitisation is necessarily negative.

⁶ This sections draws on the presentation made by Itay Fischhendler at the 2012 Colloquium: 'Who is securitising the environmental discourse, why and what its potential implications?', see <http://www.youtube.com/watch?v=5wfJzDBBQ50>.

5 Linking security to development: can gains be made?⁷

The origins of the security-development linkage can be traced through the 3D history of Defence-Diplomacy-Development that is characteristic of the United States (US) security discourse. The positive effects of linking the vocabulary of security to natural resources management discourse does open a window of opportunity to dialogue and discussion with high level military actors and engaged the traditional security apparatus in thinking about its ecological footprint. These are entry points that could provide leverage for both conflict reduction and sustainability. However, it is necessary to decide what to do with this leverage.

In the early phase of the environmental security discourse in the US, scholars like Homer-Dixon were exploring the intuition that changes in a resource could affect security quite quickly and directly. This intuition matured into an argument that there are many factors that mediate between changes in the environment and security outcomes, including technology, institutions, social capital, human ingenuity. Simple models linking natural resource (un)availability to some bleak social outcome start discussions, but at best describe only extreme cases, as we live in a very complex world fraught with uncertainty and non-linearity. In response to this, a number of people have raised concerns about bringing security and global environmental change together. For example, could this become a platform justifying extraordinary measures, or could the engagement of the security community alienate and undermine some sustainability efforts?

On the other hand, the environmental discourse has perhaps provided a useful opportunity to challenge the vast and rather monolithic post Second World War military apparatus and built architecture around human security and development. The Clinton-Gore administration took a very keen interest in the possibility of this type of transformation, which was reflected in some important strategic shifts, such as opening the Department of Defence to civilian activities. It was motivated by the belief that environmental change was an important issue and needed to be addressed at the highest levels of the government. However the Bush-Cheney-Rumsfeld administration that followed the Clinton era were sceptical of such measures and argued that aspects of the environmental security agenda could weaken morale and divide resources, which might affect the ability to apply force. The 2007 Intergovernmental Panel on Climate Change (IPCC) report rekindled some of the lost interest and there were talks on rethinking the best balance among the 3Ds, defence, diplomacy and development. For example, there were discussions as to how US security might benefit by putting more funds into water infrastructure, or food security, or support for technical assistance.

The US perspective on security and development helps us to understand the context and confines of this discourse, as well as to look more closely at the changes in the US, the UN and post conflict countries such as Sierra Leone, where peacebuilding activities have been linked to environment security discourses. Here we see the political leverage that security talk might bring in terms of getting *a legitimate seat at that table*.

The nexus indicates a convergence of actors, which is particularly visible in the land acquisitions in Africa. Given market volatility, land appears to be a more stable source of investment and a platform for energy, food and water security during the era of climate change. Investors have internalised this environmental security narrative in a particular way which is leading to this capital intensification. However such thinking is not concerned with the many aspects of human security or with the

⁷ This section draws on the presentation made by Richard A. Matthew at the 2012 Colloquium, 'Environment, security and development', <http://www.youtube.com/watch?v=8-g5wvCuU50>.

preservation of natural wealth. The London based Earth Security Initiative (ESI) is developing a framework to reorient investment decisions along these lines and also provide for cooperation across silos to drive win-win innovations. Thus while concerns about securitisation are compelling, they need to be weighed against the gains achieved through these linkages.

6 The challenges of the nexus formulation

So far, three different articulations around the nexus have been described: nexus as social justice, nexus as gaining political leverage; and nexus as opening up spaces for participation. However, what sets the nexus formulation apart from other concepts in the development vocabulary? What are the caveats that come with the nexus, and how can nexus be used for the cause of social justice? In this section, some of the questions are answered.⁸

6.1 *Is the nexus a useful addition to the discourse?*

After the 2008 World Economic Forum, it was the Bonn Conference in 2011⁹ which initiated the discussion on the nexus. In the German development context, the impetus for this conference lay in two motivating factors, the need to follow up on the 2001 Bonn International Conference on Freshwater and the imperative to go beyond the water mandate. The 2011 Conference, in this sense, provided the platform to bring together the three, otherwise siloed policy communities, of water, energy and food into a constructive and productive dialogue with each other. The nexus, therefore, is a perspective and it performs a specific and a very useful function of breaking the silos (of decision making and management) across sectors. It was intended to force the policy makers to factor in these cross-sectoral synergies and trade-offs, and understand how they operate at the local, national and global levels. It provides a reformed transparent framework for decision making and encourages policy makers to look systematically at interlinkages. In this way, it helps in realising spaces of collaboration and cooperation.

The nexus perspective provides the scope for a development centred dialogue among isolated policy communities, especially at the global level, and to set global targets which will help shape incentives at the national and local level. Therefore we need to start allowing time, resources and space for such intersectoral dialogues. The nexus is a way to restart the conversation about the common dependency on natural resources among a range of decision makers in these areas. However, given its global emphasis, there are concerns about the functionality of the nexus. Is this largely a donor internal debate? Is this mainly intended for the internal domestic purposes of the development industry? Is this about repackaging policy notions in the global development industry?

6.2 *The 'new' in the nexus?*

While there is a degree of repackaging involved from the 'old' concepts of IWRM and sustainable development, the nexus departs from them in certain concrete ways. IWRM limits itself to the water domain and is dominated by the water community. Sustainable development is too broad a concept to narrow down to specific issues. In this way, the nexus offers the opportunity to focus on sectors of energy, land, food and water and their interlinkages. These linkages have been largely forgotten because of bureaucratic silos and the vested organisational and institutional interests. Thus in many ways *nexus is a wake up call* to address these interlinkages. By opening up new political spaces for talking about interlinkages, it can potentially open up space for civic knowledge and provide more hooks for the civil society actors to participate in decision making. Nonetheless, the nexus should not

⁸ This section is drawn on the discussion at the 2012 Colloquium by panellists: Lyla Mehta, Christophe Merdes, Jeremy Allouche, Naho Mirumachi and Laura Hammond, who were later joined by members from the audience to reflect on experiences and challenges in framing the nexus.

⁹ From 16 to 18 November 2011 the German Federal Government organised an international conference, 'The Water Energy and Food Security Nexus – Solutions for the Green Economy'. The aim of the conference was to develop 'new approaches', which could address the interconnections between water, energy and food security nexus (German Federal Government 2011).

merely be limited to exploring these cross-sectoral interlinkages. It is also imperative to understand its allocative implications. To what extent does it open up the space to renegotiate values for ecosystem? To what extent does it challenge the status quo?

Though the nexus could be useful in opening up spaces for greater participation in decision making, there are certain limitations with its formulation especially as it may lead to the securitisation drive for resources. Furthermore, it does have ambiguous boundaries in so far as its interaction with climate change and ecosystem is concerned. We still need to examine the engagement of the nexus with these sectors. In this light, how do we define the boundaries of the nexus, is it land–water-energy-climate? If so, where do we place the ecosystem in the nexus discourse?

Furthermore, if the nexus idea continues to gain traction, it should also engage with the concept of rights and accountability. This also raises the question of the appropriate locus of nexus operations, global or local? The nexus need not be limited to the global policy level since it might help to develop links between the global and the local. Moreover global governance discourses have the potential to change incentives at the local level. These links, however, are not sufficiently developed as yet. Alternatively, if global governance becomes the appropriate locus of actions, it may well move the nexus away from the local, and legitimise certain extra-national actors who could crowd out the vulnerable and local actors.

6.3 'Security' in the nexus?

The Bonn Conference framed the nexus in the language of security, but privileged the human security lens over wider natural resource governance, and prioritised human needs and rights, to be followed by wider issues around natural resource governance. Alternatively, there are variants to securitisation, which could lead to more militarised responses. For example, agents in the Horn of Africa cast development issues as security issues to obtain funds (the poverty-desperation-conflict logic). With this logic it is easy to get everyone on board. But it can also have a rebound effect. For example, several donors declined to provide food aid to 'terrorist groups' in African famines in recent years due to this securitised relationship between resources, poverty and conflict. Therefore, like all discourses, security reasoning can be appropriated in strange ways. There is a political agenda behind such appropriation, and securitisation only further legitimises this agenda and it can marginalise local people. Thus securitisation becomes a way to mobilise resources, and *resources that come attached to agendas can be deeply problematic*. Thus, is it possible to have non-military responses if something is being securitised? Does it make sense to separate securitisation and the nexus?

6.4 Drivers of the nexus

From a global governance perspective, the origin of the nexus can be traced to the convergence of the energy, biofuels –food security and climate change crises. It is also driven by certain corporate interests. Even though there seems to be a strong narrative of science, planetary boundaries, earth system governance and business in the nexus, for now, the nexus is largely driven by the water community. How do we then engage with the involvement of corporate actors, *the elephants in the room*, who can push out everybody else? Can business really understand the interaction between water and land? Is there a better political alternative to this political process? Does this shift signal moving away from helping people and the environment to helping people and environment best serve the countries that are funding this securitisation?

7 Conclusion

The nexus formulation creates some very provocative and recurring questions. Is the nexus new? How is it different from the IWRM? Whose security are we talking about? Does the nexus address political economy questions? How can the nexus be operationalised? What are the geographical boundaries of this discourse? Does the nexus only speak to European development agencies? What does the nexus mean for rights and justice? How do we factor in power and track power structures in the nexus?

For the development industry, the nexus offers an efficient way of opening the dialogue to the wider policy communities, and not just to water. In this sense, it is perhaps a *boundary concept* (Star and Griesemer 1989), which can speak to experts across water, land, energy and climate. Unlike IWRM, which is still circumscribed to the water community despite its emphasis on interlinkages and integration, the nexus has urged us to think outside of the water box. However the boundaries of the nexus are vague. Is nexus about water-climate-energy? Or is it about water-food-energy? Where do we place land and ecosystems in the nexus thinking? How would we relationally prioritise these sectors and what does it mean for each of them? These ambiguous boundaries might make nexus an inoperative frame for very substantive reasons.

The discursive implications of the nexus are extremely significant to determine the boundaries of inclusion and exclusion in this formulation. We need to be cautious as to how the nexus is framed, by whom and in what contexts? This is not merely limited to defining the boundaries of the nexus, but also determining who can participate in the dialogue on the nexus. For instance the nexus framings of the World Economic Forum (WEF) and the Bonn Conference are quite different and tend to serve different audiences. The WEF framing is a *soft push* to powerful global players, such as the business and corporate sectors, to think about water and growth prospects. It highlights the economics of water as both compelling and challenging, *interlinking water security, economic development and GDP growth*, building investment and regulatory models for the flow of innovative water funds (World Economic Forum 2009). Alternatively, the Bonn Conference framing, privileges the human security lens over resource governance. In this light, the nexus serves as the converging point for a more development–donor internal debate in terms of getting the policy community to talk to each other. It emphasises strongly cross sectoral dialogue to integrate management and governance across sectors and scales, to reduce trade-offs and build synergies across sectors and create policy coherence (German Federal Government 2011).

The language of security within the nexus formulation also needs careful examination. Labelling the environment as a security concern allows exceptional measures to be taken, such as breaking otherwise binding rules, and governance by decrees rather than democratic decision-making. Certainly, securitisation is a nebulous concept, which may serve or has served the needs of underdevelopment, but it could also be used as a strategy to avoid aid when it is needed. In the US case, security thinking emerged in a particular context of the 3D debate, which ensures participation of non-military actors, but could it not also lead to militarisation of natural resource governance? Security can be appropriated in strange ways, justified through different and often contradictory goals. This may result in the crowding out of actors who are, in most cases, the vulnerable and on the margins of development. Thus security is not a value neutral concept. It can be used strategically, in positive or negative ways.

Besides the underlying threats around securitising the nexus, another sticking point is the role of business leading the nexus frontier. Therefore it is important to track the new power structures that are emerging with this nexus. It is the business and corporate actors that are at the centre of the nexus framing because, for better or for worse, they are also at the centre of the global food and energy

markets. The WEF framing has amply demonstrated the key role that the market may play in the re-appropriation and allocation of these resources. Thus the underlying threat of greater commodification of resources cannot be ignored. The nexus may exacerbate this race towards more water, land and green grabs under the drive for securing food and biofuels, a rush already underway in Asia and Africa. The challenge, therefore, is to think of better ways to redress this threat of commodification and alarmist rhetoric of the bubble burst.

Unpacking the power structures will also necessarily involve untying some of the political economy questions. The questions of resource (land and water) grabs and corporate actors are highly relevant the emerging and powerful role of the BRICS in the Global South, for countries that seek new sources of resources for developing capital. Therefore to think of the nexus as a donor internal debate within the North might miss the different ways in which the nexus conflicts and negotiations are taking place in other forums. Another key question is that of geopolitical interests, wherein food, fuel and energy needs of states coincide and conflict with each other. How will countries then buy-in the notion of the nexus in the face of teething transboundary struggles? These are the sites where the nexus will be operationalised and value judgements will be made regarding the priorities and resources that are likely to be securitised. How should we factor in the interaction between different scales in the nexus alongside the role of power, politics and business?

Thus it is important to develop critiques and alternative perspectives on security, which will place the redressing of social injustice and inequality, as well as issues of human rights, freedom and dignity, at centre-stage. This means inclusion in the policy framework, redistributive mechanisms, reduced consumption and debt repayment (to name just a few examples), to transform the configurations of power and authority that cause insecurities. The focus on power, rights, justice and equity needs to be maintained and strengthened, and its allocative implications emphasised. For this reason, it is imperative that human security is placed at the very center of the nexus framing.

Despite these limitations, it must be conceded that the nexus does provide a space for dialogues across sectors and also among actors. The nexus may provide certain actors, such as civil society groups, with conceptual hooks to leverage their claims and demands. However, given its emergence in a donor-development context, there are challenges regarding its scale of operation. Is this a donor-internal concept to institutionalise interlinkages across sectors? For now, the nexus appears to be a global discourse pushed by development organisations, driven by experts and still orbiting the water sector. What it means for the local users has yet to be seen. These interlinkages across sectors are most often the realities of the everyday lives of several people who currently are neither the audience nor the target for this framing but would most certainly witness the challenges of its operationalisation.

To sum up, the nexus is indeed rapidly gaining salience in the development industry. However, how the nexus is operationalised and what it means beyond the global level are some of the challenges that need to be factored in. This paper has constructively problematised the language of the nexus and security in order to understand its far-reaching implications, most of which are still to unfold in different parts of the world. The trade-offs that will eventually be made will open sites of conflict and negotiation, and it is here that the demand for reallocation for the resource poor will have to be made. It is important, therefore, to use this space, for dialogue across sectors, also to leverage the demand for rights and resource justice.

References

- Allouche, J., Nicol, A. and Mehta, L. (2011) 'Water Security: Towards the Human Securitization of Water?' *The Whitehead Journal of Diplomacy and International Relations* 12.1: 153–171
- Allouche, J., Middleton, C., Gyawali, D. (2014) *Water and the Nexus: Nexus Nirvana or Nexus Nullity? A dynamic approach to security and sustainability in the water- food-energy nexus*, STEPS Working Paper 63, Brighton: STEPS Centre
- German Federal Government (2011) 'Bonn2011 Nexus Conference: the Water, Energy and Food Security Nexus – Solutions for a Green Economy, Policy Recommendations'
- Global Water Partnership (2000) *Integrated Water Resources Management*. Technical Advisory Committee Background Paper 4, Stockholm: Global Water Partnership, [http://www.gwp.org/Global/ToolBox/Publications/Background%20papers/04%20Integrated%20Water%20Resources%20Management%20\(2000\)%20English.pdf](http://www.gwp.org/Global/ToolBox/Publications/Background%20papers/04%20Integrated%20Water%20Resources%20Management%20(2000)%20English.pdf) (Accessed 14/ 10/14)
- Star, S. L., and Griesemer, J. R. (1989) 'Institutional Ecology, `Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology', *Social Studies of Science* 19.3: 387–420, <http://sss.sagepub.com/content/19/3/387> (Accessed 24/01/2012)
- United Nations Development Programme (1994) *Human Development Report: New Dimensions of Human Security*, New York and Oxford: Oxford University Press
- World Economic Forum (2011) *Water Security: The Water-Food-Energy-Climate Nexus*. Washington DC: Island Press
- World Economic Forum (2009) *Thirsty Energy: Water and Energy in the 21st Century. Energy Vision Update*, Geneva: World Economic Forum

Further Reading

Beddington, J. (2009) *Food, Energy, Water and the Climate: A Perfect Storm of Global Events?* London: Government Office for Science,

<http://webarchive.nationalarchives.gov.uk/20121212135622/http://www.bis.gov.uk/assets/goscience/docs/p/perfect-storm-paper.pdf> (Accessed 15/10/14)

Campbell, A. (2008) 'Food, energy, water: Conflicting in securities (and the rare win wins offered by soil stewardship)', *Journal of Soil and Water Conservation* 63.5: 149A–151A

Dupar, M. and Oats, N. (2012) *Getting to grips with the water-energy-food 'nexus'*, London: Climate and Development Knowledge Network, <http://cdkn.org/2012/04/getting-to-grips-with-the-water-energy-food-nexus/> (Accessed 16/10/14)

FAO (2000) *The Energy and Agriculture Nexus*, Environment and Natural Resources Working Paper 4, Rome: FAO

Fischhendler, I. and Katz, D. (2013) 'The use of 'security' jargon in sustainable development discourse: evidence from UN Commission on Sustainable Development', *International Environmental Agreements: Politics, Law and Economics*, 13:3: 321–342

Mehta, L., Veldwisch, G.J. and Franco, J. (eds) (2012) 'Special Issue: Water grabbing? Focus on the (re)appropriation of finite water resources', *Water Alternatives*, 5:2

Working Group on Green Economy (2012) *Is the Green Economy a New Washington Consensus?* Montreal: Global Research, <http://www.globalresearch.ca/is-the-green-economy-a-new-washington-consensus/29462> (Accessed 16/10/14)

Zeitoun, M. (2011) 'The Global Web of National Water Security', *Global Policy*, 2.3: 286–296