Achieving the UN Sustainable Development Goals
Introduction

At the UN sustainable development summit on September 25, the world’s leaders have adopted a new set of Sustainable Development Goals of remarkable breadth and ambition, and committed themselves to “working tirelessly for the full implementation of this Agenda by 2030”. For the next 15 years, the 17 Sustainable Development Goals (SDGs) and 169 targets will guide global policy on a wide range of issues, from poverty alleviation and inequality, to democracy and peace, sustainable consumption, climate change, and ecosystem preservation. The ongoing challenges now are to implement the goals, measure attainment, and review progress.

This collection of short policy briefs, drawing on the work of experts at Newcastle University working on all three of Newcastle’s societal challenge themes – Sustainability, Ageing and Social Renewal – represents an academic response to these challenges. Although they address diverse goal areas, common themes emerge in the briefs:

• The effective alignment of headline goals, the targets and what will be measured, is critical.
• The goals are interlinked in complex and subtle ways, meaning they will be attained – or missed together.
• The goals are underpinned by wider ideas of equity and rights, in ways not always highlighted in the goals themselves.
• The goals will have to find their place in an existing framework of international agreements and commitments, and so the need for alignment with existing processes is also critical, if the goals are to be effective implements of policy change.

In the summit outcome document, entitled “Transforming our World”, the world’s leaders ask for a strengthening of the global “science-policy interface” as part of that transformation. This collection of policy briefs is an initial contribution in response to that call. The briefs emerge from an initiative on the SDGs at Newcastle University over the last year. This, in turn, reflects Newcastle’s commitment to be a world class civic university tackling the most important societal challenges on a scale from the local to the global.

About Newcastle University

Newcastle University is a public research university located in Newcastle upon Tyne in the North-East of England. It is a member of the Russell Group, one of 24 leading research universities in the UK and has a global reputation for academic excellence. We emphasise that the primary feature of a civic university is its sense of purpose – an understanding of not just what it is good at, but what it is good for.

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Creating universal access to clean water and sanitation is about democracy and human rights

Goal 6: “Ensure availability and sustainable management of water and sanitation for all”

Summary

In ‘ensuring availability and sustainable management of water and sanitation for all’, goal 6 is not merely a question of technical accessibility but also about democracy and realising the human right to water. The UN General Assembly and UN Human Rights Council made resolutions in 2010 establishing access to water as a human right. Dominant international trends, however, treat water as a commodity rather than a human right or public good. This is a major impediment to achieving goal 6, and there needs to be critical examination of water commodification in the developing world.

Rethinking water as a right rather than a commodity

Access to safe water and sanitation continue to be of major concern worldwide despite considerable advancements made by the Millennium Development Goals (MDGs).

• Based on water quality and safety alone we are still far from meeting the MDG target for water, including halving the world’s population without sanitation by 2015.
• Even if the MDG targets were met at least 0.7 billion people would still lack access to water and 1.73 billion people would lack access to some form of sanitation after 2015.
• While people in developing countries may have access to ‘improved’ water sources, they may not necessarily have ‘safe water’ (e.g., according to the 2014 MDGs Report) [1]. The challenge of goal 6, therefore, is massive.

Commodification of water resources stands in the way of the human right to water because it puts the control of those resources in the hands of private companies and wealthy individuals. Currently, dozens of countries believe these services should be commodified, and so do not support this right. However, the majority of the water on the planet remains un-commodified [2]. For water resources that have not been commodified, there is a massive opportunity for countries to put in place policies for ensuring people’s access to them – substantially improving their quality of life – particularly in the developing world.

Recommendations for attaining goal 6:

• The causes of failure to meet targets on adequate access to water and sanitation are multidimensional, involving natural, social, and individual processes and factors, and require systemic solutions drawing on interdisciplinary expertise and inter-sector collaboration in policymaking and implementation.
• Governments, international financial institutions, aid agencies, and other relevant actors must abandon their support for water commodification and privatisation. Policies of water commodification that have prevailed for the last three decades failed to contribute towards the MDGs and have created widespread social conflicts.
• The water sector must be subject to democratic control that democratises water politics and management. This requires putting in place effective legal and administrative mechanisms for meaningful citizen involvement.
• Support the development of public-public and public-community partnerships to make universal access to water and sanitation a public good and a human right in practice [3]. Rebuild the policy and planning capacities of the public sector at all levels, with emphasis on local authorities.
• The public policies required to achieve the universalisation of essential services must be grounded on the principle of equality, and must subordinate economic efficiency and private profit to the higher goals of democratic wealth distribution and civilised well-being.

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References:

Aligning the SDGs with global policies for biodiversity

Goal 15: “Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”

Summary

There are currently a plethora of global commitments and processes intended to promote conservation and ensure a sustainable environment. The SDGs – especially goal 15 on protection of the terrestrial environment, and goal 14 on the protection of oceans – need to avoid becoming just another set of biodiversity commitments to be met. The SDGs could play a major role to help chart the course for policies and action to fulfil these commitments and lead to genuine protection for our planet, if they sit amongst these other processes in a way that maximises alignment and impact.

The SDGs in a wider environmental context

The SDGs concerned with environmental protection enter a crowded arena: there are a range of global political commitments, known as Multilateral Environmental Agreements (MEAs) already in place. Some focus on endangered species or migratory species, while others focus on biological diversity or combatting desertification. While each one is unique they are all concerned with the deterioration of biodiversity, whether it is species, habitats or the processes that lead to degradation. Many UN member states have signed up to them, but how can the SDGs align with them to protect our terrestrial ecosystems, oceans, seas and marine resources?

In meeting goals 14 and 15 challenges of measurement, alignment and ambitious implementation need to be addressed:

- **Accurate measurement** of biodiversity helps countries to reach their targets. Whilst interaction between species and ecosystems is complex and variable, the wording of goal 15 and contributory targets do not make for easy measurement, leaving a key role for the indicators adopted at national, regional and global level.

- **Global goals and targets on biodiversity should be aligned** so that political, social and scientific efforts are most effectively directed to where they will have the biggest gain on our ability to look after the planet.

- **Implementation** of the goals with maximal efficacy is critical, given the alarming rate at which species are disappearing as the planet moves into the Sixth Great Extinction [1]. Mass extinction events occur when the Earth loses more than 75% of its species within a short geological time frame. Taking into account the current high extinction rates in comparison to the fossil record, the sixth mass extinction could occur in a few centuries if threats to species are not alleviated.

Key recommendations for states:

- **The importance of indicators** - Translate the political aspirations captured in goal 15 and targets into indicators that can be measured reliably and reflect appropriate metrics on which to assess the status of biodiversity.

- **The importance of guidance from science** - Singling out habitats for conservation efforts needs to be backed by the most recent evidence. Grasslands for example have experienced a significant decline since 1700 [2]. The ecological zones of Australasia and the Palaearctic have lost 69% and 56% of grasslands respectively. Habitat blocks adjacent to ones that have been cleared are more likely to be cleared, and this can be prevented if the clearance is not allowed to start.

- **The importance of synergy between SDGs and existing MEAs** - Conservation actions stop extinctions, but clearer synergies between MEAs would be hugely helpful in maximising the benefit of political commitment, maintaining and increasing civil society input and making the most of scarce resources. Where the SDGs do not overlap with targets of the Convention on Biological Diversity’s Strategic Plan for Biodiversity 2011-2020, states and other actors need to decide on ways in which they can be best aligned.

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References:

Sustainable, reliable and affordable low-carbon energy

Goal 7: “Ensure access to affordable, reliable, sustainable, and modern energy for all”

Summary
The world faces steep challenges in meeting current and future energy demands with low-carbon energy sources. Access to energy is important for health, economic development, education, and communications, but countries need to identify what kind of ‘modern energy’ is required, its intended impact and how it will be implemented.

Modern energy: sustainable, reliable, efficient energy supply
Goal 7 targets ‘modern energy’, but modern energy needn’t take the same form in every country. Instead, it should be understood as responding to the demands of consumers and communities. In Europe, this might mean high quality power with extensive infrastructure, but energy demands can be met in lower cost, and more decentralised ways. However it is understood, energy faces the same imperatives, including the need for sustainability, reliability of supply, and efficiency.

Sustainability: To make energy supply and transmission more sustainable, countries need to address the actual cost of carbon through carbon trading or taxation schemes. Otherwise it will be very hard for low-income countries to invest in renewables in place of fossil fuels. Costing carbon appropriately allows for the revenues generated to be reinvested into the low-carbon transition. Decarbonising countries’ energy supplies involves decommissioning (or reducing the running time of) fossil fuel-based energy generation. This ‘switch-off’ cannot take place all at once, and needs careful planning by a ‘system architect’ [1].

Reliability: As renewables penetrate the global energy market all countries will face issues of energy grid balancing and stability. Energy storage is vital to making clean energy resources available to all. Though expensive now, it will become increasingly available as the cost of carbon increases and the cost of renewable energy supply goes down. The problem of grid balancing does not necessarily need a high-tech solution, as energy can be stored in multiple forms at a range of scales appropriate to the needs of users [2].

Efficiency: In unbundled markets, the energy supplier has little commercial interest in increasing energy efficiency – they simply sell electricity, and have nothing to do with the wires that deliver it [3]. This makes energy efficiency hard to get off the ground. Instead, where the supplier and utility are bundled together, the savings from energy efficiency can offset – and outweigh – costs of infrastructure investment in efficiency. Efficiency at the level of the end-user is also important, with smart grid technologies allowing energy users to monitor their energy usage and identify potential savings.

Recommendations for developing implementation of goal 7
Countries that are beginning to establish or increase accessibility to electricity should:

• Avoid having an unbundled market that separates energy supply from transmission and distribution. Instead they should look at developing a system that sells energy as a service [4] rather than by the kilowatt-hour.
• Account for off-grid solutions – e.g. microgeneration and local delivery – as part of user – appropriate energy provision and promote decentralised, community-led energy provision.
• Cost carbon appropriately – as a ‘hidden cost’ in countries’ energy balance sheets it diverts attention from the actual cost of fossil fuel dependence.
• In making energy efficient, affordable and reliable it also needs to be appropriate and demand driven. Countries need to define, in a participatory way, their own energy needs and values.

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References:
What does it mean to reduce inequality between countries?

Goal 10: “Reduce inequality within and among countries”

Summary

The second component of goal 10 – “reduce inequality…among countries” – is problematic. The content of the goal currently sidesteps the question of material inequality between countries. The right approach to understanding this goal fully is one based on a wider measure of per capital wealth, that involves measuring and reducing the inequalities in the value of each country’s financial and physical assets.

The challenge of targeting and measuring international inequality

Although some wording and sub-goals address the idea, the targets and indicators under goal 10 do not explicitly aim at reducing substantive inequality in wealth between countries or offer a metric for measuring progress towards this goal. So, how should we understanding this aim and idea?

In reducing inequality amongst countries, the challenge for the SDGs is to decide what aspects of countries should be compared and, potentially, equalised. Considering this issue is important because some traditional measurements of inequality offer misleading pictures. Historically, inequality between countries has often been articulated in terms of GDP, but that measurement does not take into account how the size of an economy relates to the size of a country’s population. An initial response is to measure per capita, thus taking population size into account. But there is also a further question of what should be measured per capita. Here are two options:

• A GDP/capita model that measures the final value of goods and services produced within a nation’s borders.
• A wealth/capita model that measures assets, including currency reserves, bond holdings, and physical goods, such as land, natural resources, and rights to global commons.

My suggestion is that this second approach is preferable and we should measure inequality through the gap in per capita national wealth between countries. Our goal should be to reduce the difference between countries’ per capita financial and physical assets. GDP/capita does not take full account of the aspects of a country’s circumstance that affects the welfare of its population. To take two clear examples, currency reserves and natural resources – which are considered in wealth/capita, but not in the GDP/capita measure – both allow a country to provide its population with economic security and future consumption.

Addressing international equality: a measurement and policy agenda:

• Cross-country comparisons should focus on inequality measured in national wealth, and this focus should be reflected in the indicators – at national, regional, and global levels. Doing so requires establishing a national wealth index and collecting data on countries' financial and physical assets. This is an important area in which the SDG measurement needs to move beyond GDP (e.g. Target 17.19), as the outcome documents suggests.
• Cross-country comparisons should focus on inequality per capita. However, even aggregate measures of GDP/capita will not take account of all the aspects of a country’s circumstance that affect the welfare of its citizens. In order to pursue this aim in an appropriate manner, it is necessary to consider the distribution, and redistribution, of financial and physical aspects across the world. This concern is central if the SDGs are, as they claim, to “leave no one behind” - and it needs to be addressed by governments.
• Actors implementing this goal should mind the gap between the goal and the targets. If states want to reduce substantive inequality between countries, they should focus on realising specific targets within goal 10. For example, the proper implementation of target 10.a (adopting a progressive tariff regime) and target 10.b (increasing aid and investment in developing countries) are vitally important for redistributing some of the world’s economic resources.
• The interlinkages with other goal areas are crucial. Targets 17.10 - 17.12 on shaping international trade must focus on delivering an equal and equilibrated market to ensure that asset holdings can be fairly distributed. Target 16.7 emphasises ensuring responsive, inclusive, participatory, and representative decision-making; this is necessary if countries’ choices about asset holdings are to reflect the collective interest of their people.

Contact

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Further reading: The main ideas above are drawn from Walton’s current research project “On the Currency of International Equality”. For more information please contact the author.

Other relevant publications include: