Provisioning systems as gatekeepers of sustainability and human well-being

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Résumé

One of the greatest challenges of our time is to meet everybody's basic needs whilst remaining within planetary boundaries. Currently, all countries that achieve high levels of needs satisfaction do so at vastly unsustainable levels of biophysical resource use. Conversely, in all countries with sustainable levels of resource use, people are heavily deprived of basic needs.

The globally dominant development paradigm, advocating the pursuit of 'the good life' through ever-growing consumption (underpinned by neoclassical utility theory), thus appears fundamentally misaligned with the goal of sustainably meeting everybody's basic needs. Contrary to mainstream beliefs, technological solutions alone are very unlikely to remedy that, in light of thermodynamic, biophysical, and economic realities. Instead, societies would have to fundamentally redesign the way they satisfy basic needs (and other ends), concerning both the types and quantities of goods and services they consume, and the way these are provided. However, little is known about how different ways to organise societies and the provisioning of goods and services co-affect resource use and human well-being outcomes.

We address this research gap with a quantitative empirical analysis centred on the novel heterodox concept of 'provisioning systems' [O'Neill et al., 2018: Nat. Sust.]: systems of interlinked physical and social aspects of provisioning that shape the relationship between biophysical resource use and needs satisfaction through alternative ways of providing alternative sets of goods and services. This approach moves beyond the narrow mainstream focus on the market as the provider of those goods and services that meet people's needs (if they can afford them!), adopting instead a systemic understanding of 'social provisioning' that is rooted in political economy as well as feminist, social, and institutional economics. By considering both physical aspects of the supply chain (from extraction to disposal) and social factors that shape what, how much, how, by whom, and for whom is provided, the provisioning systems approach integrates the spheres of production, consumption, and societal organisation, building on the (more qualitative) 'Systems of Provision' approach [Fine and Leopold, 1993: Routledge].

We characterise provisioning systems in terms of their influence on energy use and the satisfaction of universal human needs [Doyal and Gough, 1991: Guilford Press], based on a statistical assessment of the influence of a wide range of physical and social factors described quantitatively at country level. Using a wealth of international databases, we analyse provisioning aspects including: heating and cooling requirements; population living in slums;

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political stability; political voice and accountability; rule of law; corruption; social conflict; income inequality; trade union density; social security and labour programs; and public expenditures on health care, education, and the military.

Our study is the first to provide a coherent characterisation and functional analysis of provisioning systems for a wide range of countries. Our results indicate which aspects and configurations of provisioning systems, in which context, favour or disfavour basic needs satisfaction at low energy use. These findings may reveal versatile levers for societal transformations towards sustainable and more equitable societies that provide for everybody's basic needs.

Mots-Clés: Provisioning, systems, social, provisioning, SoP, societal, transformation, energy, resource, wellbeing, needs, planetary, boundaries, sustainability, production, consumption, quantitative, empirical, international, statistical, heterodox, political, economy