



The development and application of a sustainable diets framework for policy analysis: A case study of Nepal



Shauna M. Downs^{a,*}, Alex Payne^b, Jessica Fanzo^{a,c}

^aThe Berman Institute of Bioethics, Johns Hopkins University, 1809 Ashland Avenue, Baltimore, MD 21205, USA

^bAmplify Urban Planning and Development, 218 Troutman Street, Suite 1L, Brooklyn NY 11237, USA

^cThe School of Advanced International Studies, Johns Hopkins University, 1717 Massachusetts Avenue, #730, Washington DC 20036, USA

ARTICLE INFO

Article history:

Received 4 May 2016

Received in revised form 4 April 2017

Accepted 14 May 2017

Available online 3 June 2017

Keywords:

Sustainable diets

Policy analysis

Climate change

Sustainable development

ABSTRACT

The objectives of this study were to 1) develop a policy analysis framework for examining the components of a sustainable diet and 2) to apply its use to three relevant national policies in Nepal. We developed a policy analysis framework using existing literature and applied the framework to three Nepalese policies: Nepal's Multisectoral Nutrition Plan (MSNP) 2013–2017, Agricultural Development Strategy (ADS) 2015–2035 and National Biodiversity Strategy and Action Plan (NBSAP) 2014–2020. Each policy was coded independently by two researchers to examine whether the different components of the sustainable diets framework were mentioned and if they had associated policy actions. We then used a health policy analysis tool to examine the overall quality of each policy. The ADS mentioned the most (89%) components of the sustainable diets framework as compared to the NBSAP (58%) and the MSNP (70%). If all three policies were fully implemented they would address all but one of the components of a sustainable diet, with the potential to deliver for health and the environment. However, there was a lack of clarity regarding how the resources to accomplish the policy objectives would be obtained as well as insufficient detail regarding the policies' monitoring and evaluation frameworks. The sustainable diets framework developed in this study enables the identification of gaps where policies need to broaden their focus in order to incorporate a more holistic view of the food system. This will become increasingly important as climate change continues to persist and the need for more resilient food systems becomes more recognized.

© 2017 Elsevier Ltd. All rights reserved.

1. Introduction

In the past several years, we have begun to better understand the impacts of our global food system on human and planetary health (Whitmee et al., 2015). One of the greatest challenges that humanity faces is how to secure healthy, nutritious and safe food to feed an ever-growing population who are getting wealthier and demanding more diverse and sophisticated foods. We are witnessing unprecedented shifts in populations, which impact the way food is grown, purchased and consumed (Ehrlich and Harte, 2015). Not only are we undergoing demographical and epidemiological shifts, but also nutritional status shifts, with increasing urbanization which often coincides with increased obesity and non-communicable disease (NCD) risks due to sedentary lifestyles, complex food environments and unhealthy eating patterns (Anand

et al., 2015; Popkin et al., 2012). At the same time, undernutrition continues to persist in many countries.

With the Sustainable Development Goals (SDGs), there is a growing emphasis on the need to ensure that our food systems and diets are more sustainable. We know that what we eat and the way in which we produce food has profound impacts on carbon, water and ecosystem footprints (Tilman and Clark, 2014; Tilman et al., 2011; Downs and Fanzo, 2015). The concept of “sustainable diets” underlines the need to improve the quality and environmental sustainability of the diet (Johnston et al., 2014). Although a healthy diet is not necessarily sustainable (e.g., a product of unsustainable agricultural practices), a sustainable diet is by definition also a healthy diet (Burlingame and Dernini, 2012).

In recent years, there has been a growing interest in the sustainability of the diets that we currently consume and those that we are projected to consume in the future (Tilman and Clark, 2014; Perignon et al., 2017). Research in this domain has largely focused on examining greenhouse gas (GHG) emissions of diets (Perignon et al., 2017) and has found diets lower in energy and in animal

* Corresponding author.

E-mail addresses: shauna.downs@sydney.edu.au (S.M. Downs), payne.alex@gmail.com (A. Payne), jfanzo1@jhu.edu (J. Fanzo).

sourced foods to have the lowest carbon footprint (Tilman and Clark, 2014; Garnett, 2014; Aleksandrowicz et al., 2016; Jones, 2016). However, many of the broader components of sustainable diets are underrepresented in the literature (Perignon et al., 2017). The concept of sustainable diets implies assessing the environmental concerns together with health, nutrient adequacy as well as the affordability and cultural acceptability of diets (Garnett, 2014). By examining the various different dimensions of sustainability it is possible to identify trade-offs and synergies among the different dimensions of sustainable diets. We need to delineate what constitutes a sustainable diet from environmental, biological, cultural and health standpoints, at the global, regional, local and individual levels (Johnston et al., 2014). While frameworks and methodologies to assess and quantify the broad concept of sustainable diets have been proposed (Gustafson et al., 2016; Donini et al., 2016; Dernini et al., 2013) the “sustainability” aspects of diets remains elusive and undefined at the country level, where much of the necessary policy will need to be developed.

Including the concepts of sustainable diets in national policies has the potential to set the stage for policy action. However, the complex web of determinants of sustainable diets makes it challenging for policymakers to understand their benefits and what type of policy actions would be necessary to promote them. More and better data need to be generated alongside improved indicators to assess the impact of the various determinants of the sustainability of a diet and the trade-offs associated with any recommendations aimed at increasing the sustainability of our food system and, ultimately, human health (Johnston et al., 2014; Auestad and Fulgoni, 2015).

Nepal is a small, landlocked South Asian country, that is not immune to dietary shifts, changing demographics and risks to productive, healthy food systems. Consumption (i.e., use of goods and services) and income levels have increased remarkably in the last decade and poverty rates have declined dramatically (GoN, 2011; IFPRI/GNR, 2015). Even with its high rate of poverty reduction due to a number of factors including urbanization and increased remittance income from out-migration, Nepal still suffers with high levels of malnutrition, food insecurity and poverty on the global scale (Population Division Ministry of Health and Population, 2012). At the same time, the country is also beginning to experience the consequences of the nutrition transition – overweight and obesity rates among women increased from 1.6 to 10.1% between 1996 and 2006 and from 19% in 2010 to 21% by 2014 (WHO, 2015; Vaidya et al., 2010; Balarajan and Villamor, 2009). Moreover, food consumption patterns have shifted towards high-value food items such as refined rice, fruits and vegetables, livestock and fishery products which has improved diet diversity and nutritional outcomes, (IFPRI, 2010). Although rapidly changing consumption patterns have improved nutritional outcomes in Nepal, there has also been a simultaneous shift to potentially unhealthy dietary patterns. On average, Nepalese households are consuming ten times the amount of sugar-sweetened snacks (16 g/month to 137 g) as they did 10 years ago and, oil/ghee consumption has increased by 50% (Government of Nepal, 2013).

The Nepalese economy is fundamentally agrarian and profit generated through its agriculture contributes to approximately one third of Gross Domestic Product (GDP) and is the largest source of informal employment to the Nepalese people. Without inclusive development of the agriculture sector in an agrarian-dominated economy such as Nepal's, it is unlikely the country can achieve its goals of poverty reduction, improved food and nutrition security and sustainable development (Bezemer and Headey, 2008). The relatively stagnant performance of Nepal's agricultural sector is largely due to poor crop yields and post-harvest losses caused by the country's susceptibility to man-made and natural disasters, severe climate changes, limited land/production resources, and

low agricultural input usage. Man-made and natural disasters that limit agricultural output in Nepal include monsoons, flash floods, erosion and drought. And as witnessed in 2015, Nepal suffers from catastrophic earthquakes which are devastating to populations not only in terms of mortality and morbidity but also by cutting off populations living in the hill and mountainous regions of Nepal, ramping up massive food insecurity and negatively impacting livelihoods.

Nepal is committed to improving nutrition and has recently demonstrated this commitment with the drafting of a Multi-Sectoral Nutrition Plan (MSNP) (Government of Nepal, 2012) and an Agriculture Development Strategy (ADS) (Government of Nepal, 2015) with a Food and Nutrition Security Plan of Action (FNSP) embedded within its core cross-cutting mandate. In recognition that all aspects of human wellbeing depend on ecosystem services, which themselves depend on biodiversity, (WHO, 2015) Nepal has also developed a National Biodiversity Strategy and Action Plan (NBSAP) (Government of Nepal, 2014). Thus, the objectives of this study were to (1) develop a policy analysis framework for examining the components of a sustainable diet and (2) to apply its use to three relevant national policies in Nepal: nutrition (MSNP 2013–2017), agriculture (ADS 2015–2035) and biodiversity (NBSAP 2014–2020).

2. Materials & methods

2.1. Development of sustainable diets framework

We developed a policy analysis framework to examine the various components of a sustainable diet. The framework was designed to encompass all the different dimensions of sustainable diets with the view to applying the framework to identify gaps in policies where dimensions of sustainable diets were missing or required strengthening. Given that policies set the stage for action, recognizing the different components of sustainable diets in policies may be the first step towards obtaining buy-in for actions at the programmatic level that address the dimensions of sustainable diets. By getting sustainable diets on the government agenda, with budgetary allocations, there is a greater likelihood that there will be resources aimed at addressing its various components.

In order to identify the different components to be included in the framework, we conducted a literature review of both peer reviewed and grey literature that included a definition of the different components of a sustainable diet. In particular, the framework included components of sustainable diets described by Garnett (2014), Burlingame and Dernini (2012), Johnston et al. (2014) and Donini et al. (2016). After compiling all the different components of the definition of sustainable diets described in the literature examined, we adapted and combined the constructs to ensure clarity and reduce overlap. We also added additional constructs that we deemed missing from the literature examined. These constructs were subsequently organized based on five domains: (1) nutrition and health; (2) agriculture and food security; (3) environment and ecosystems; (4) markets, trade and value chains for economic growth; and (5) sociocultural and political factors. The development of the framework was iterative – the constructs were adapted and refined throughout the policy analysis process. This was to ensure that all authors were conceptualizing the constructs in the same way and coding policies accordingly. In order to do this, SMD and AP conducted a preliminary coding of policy documents independently whilst identifying areas where there was a lack of clarity in the sustainable diets constructs. All three authors then discussed discrepancies in the conceptualizing of constructs together as a group and subsequently refined them based on their discussion. During this stage of the framework development process no qualitative software was used.

Download English Version:

<https://daneshyari.com/en/article/5070070>

Download Persian Version:

<https://daneshyari.com/article/5070070>

[Daneshyari.com](https://daneshyari.com)