

Improving Environmental Targets through Attention to Perceived Fairness

Fairness or justice is a major concern for all people. If a process is not considered fair, people will not support the process. While there is a growing trend towards improving agricultural sustainability, the implementation and uptake of sustainability initiatives can be improved if burdens imposed on those expected to participate are perceived as fair.

Fairness in Setting Environmental Targets

Environmental targets are becoming a more prominent feature of farming, often deployed through a sustainability assessment programme. If the participants in the programme do not consider the environmental mitigation burdens they receive to be fair and equitable, they will be less likely to accept them.

The division of environmental mitigation burdens amongst a diverse group of people inevitably involves considering trade-offs between efficiency and equality. Fairness is context dependent. An individual's circumstances can influence the level of burdens they should fairly bear.

Matters such as their financial position, their geographic location, and their level of effort or contribution to a cause can all influence perceptions of what a fair level of burden should be. In order to understand how these factors influence perceived fairness, it is necessary to ask farmers directly.

- Growers prioritise fairness over production impacts when setting environmental targets
- Growers struggling financially should be given lower environmental targets
- Challenging local environmental conditions do not provide sufficient grounds for lowering environmental targets
- Growers who fail to contribute sufficient effort to environmental mitigation should receive higher targets.

Environmental Mitigation and Target Setting in Horticultural Enterprises

Horticultural enterprises are increasingly adopting self-regulatory environmental practices. On-farm environmental initiatives commonly set targets for individual enterprises to achieve. Research was conducted with 94 horticulturalists throughout New Zealand to determine a set of rules that could be used to set fair environmental targets.

A vignette survey was used to elicit perceptions of fairness from farmers when deciding on how environmental targets should be allocated. A vignette is a short hypothetical scenario, which is presented to participants in order to reveal their perceptions, values, social norms, or impressions.

Participants could allocate environmental targets in three ways (Utilitarian, Rawlsian, Egalitarian), each of which had implications for the level of burden and individual farmer would bear, as well as entailing different

losses of production for the industry as a whole. These trade-offs are summarised in **Table 1:** *Trade-offs in Allocation Mechanisms*

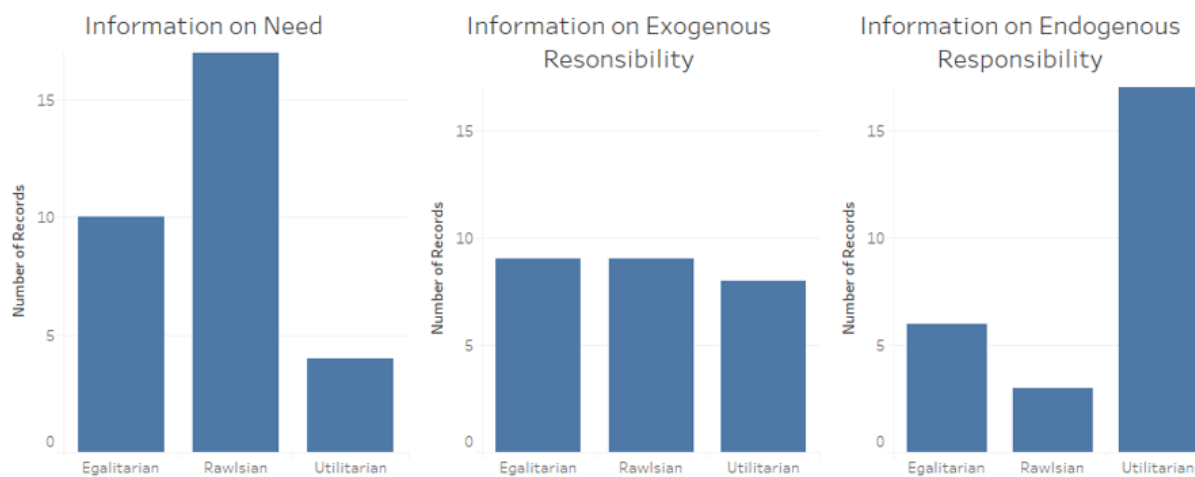
Table 1.

Allocation Mechanism	Impact on grower A	Impact on grower B	Impact on industry
Utilitarian	None	Moderate	Minor
Rawlsian	Minor	Minor	Moderate
Egalitarian	Moderate	Moderate	Major

Participants were then given some contextual information on the one of the growers (Grower B) to determine whether this would affect how they allocated burdens. The first piece of contextual information stated that Grower B was struggling financially (*need*). The second piece stated that Grower B faced challenging climatic conditions (*exogenous*

responsibility), and the third piece stated that Grower B had put little effort into environmental mitigation (*endogenous responsibility*). After receiving each piece of information, the participants were asked to allocate burdens again. The results of this are shown in Figure 1.

Figure 1: *The Effect of Context on Fairness Preferences*



Implications for Policy

The research resulted in a set of guidelines that can be used to set fairer environmental targets in the horticultural sector.

~ When establishing a mechanism to allocate environmental mitigation targets amongst growers, effects on the growers' production should not be the primary concern.

~ The financial circumstances of a grower should be accounted for when setting environmental mitigation targets.

~ Challenging environmental conditions do not provide grounds for reducing environmental mitigation targets.

~ Growers who demonstrate a low level of effort in their environmental mitigation activities should be given additional burdens.

Contact

Jay Whitehead
Agribusiness and Economics Research Unit, Lincoln
University

Further Information

Journal Article: The Influence of Distributive Justice on Agricultural Environmental Sustainability. International Journal of Environment and Sustainable Development. IJESD 2017 Vol.8(10): 736-741 doi: 10.18178/ijesd.2017.8.10.1048

Interactive Results:
<https://www.sustainablewellbeing.nz/distributive-justice>

New Zealand Sustainability Dashboard Website:
<http://www.nzdashboard.org.nz/>