

Spatial Land-Use Budgeting for Climate Actions

Guro Voss Gabrielsen (Norway)

Key words: Access to land; Capacity building; Implementation of plans; Land distribution; Land management; Land readjustment; Real estate development; Risk management; Spatial planning; Valuation; Land-value change; spatial interventions; operational tool

SUMMARY

Spatial land-use budgeting for climate actions

“Buy land, they don’t make it anymore”, said Mark Twain. And he was right. With climate change combined with the need for energy and topped with today’s geospatial situation, we’re facing a whole new battle of land. Green industries, such as battery plants and windmills, leave a massive land-use footprint. Our great keepers of CO₂, such as swamps and old forests, decline whilst settlements are flooded and cultivated land become scarcer. This influences almost every one of the 17 sustainable development goals.

Everything points back to the importance of land-use, spatial interventions, and spatial planning. But to make spatial plans for a sustainable future, we need to know what we have, and what we gain or lose. The Norwegian Ministry of Local Government and Regional Development has therefore launched new guidelines on how to create a spatial land-use budget, targeting urban and rural planners in local municipalities. The guidance consists of text and a step-by-step guide on how to create a local or regional budget, and information about geospatial data and software that are needed. The guidance also goes into detail about how the results of the budget should be conveyed to decision makers, and its potential applications throughout the various phases of the planning process.

Land value change and spatial interventions matters. This paper will present key components in building a spatial land-use budget and how it contributes to surveying past, present and future land-use. It will further elaborate on the impact of land-use budgeting on preventing climate change, improving climate adaption, and protect nature. Lastly, the paper will make space for some notes on digitalisation of the planning process and the need for, and use of, digital registers of

spatial plans.

Spatial Land-Use Budgeting for Climate Actions (12576)
Guro Voss Gabrielsen (Norway)

FIG Working Week 2024
Your World, Our World: Resilient Environment and Sustainable Resource Management for all
Accra, Ghana, 19–24 May 2024