Nature value bargaining (Luonnonarvokauppa)

Nature value bargaining was a voluntary and temporary (10-20 years) biodiversity protection instrument in which forest owners got payment for maintaining and/or increasing biodiversity in a certain forest area within their forest holding. The solution was tested in pilot project phase (2002-2007) when the different protection instruments for METSO program (biodiversity protection programme for Southern Finland) were developed.



Summary

The "Nature value bargaining" was tested during METSO pilot programme 2002-2007. The aim was to operationalize markets for biodiversity and natural values. Forest owners received subsidy for making the contract. The subsidy level was based on both the biodiversity values of the stand and timber stock. In addition, forest owners' goals affected their price demands, improving the cost-efficiency of the system. After the pilot period, the instrument was abandoned and replaced with more traditional AES due to EU-level legislative reasons.



RESULT-ORIENTED



In Nature Value Bargaining, the subsidy was partly based on the existing and potential (future) biodiversity values of the forest area offered for protection.

PUBLIC GOODS



Biodiversity

INDIRECT EFFECTS

Temporary protection of the rather large areas indirectly improved the provision of various other public goods, such as landscape and scenery (no timber harvesting in protected areas), recreation, cultural heritage and water quality.

LOCATION

FINLAND



Area where Nature value Bargaining was piloted: FI196, FI1C1

Objectives

The objective of nature value bargaining was to establish markets for the natural/biodiversity values of forests. In these markets, forest owners are active and voluntary participants who offer valuable areas from the forests they own (Gustafsson ja Nummi 2004). Owners are encouraged to provide natural values by making temporary contracts with authorities (Forestry Centre or Environmental Centre) and by receiving a subsidy for providing the nature values. Basically, private forests are thus rented/leased to state for providing natural values fort he predefined period.



Problem description

The voluntary instrument (being part of the planned METSO biodiversity protection program for Southern Finland) was developed as a response to increasing societal understanding that negative biodiversity development needs to be considered more seriously globally and nationally. In particular, it was considered as a solution to Southern Finland, which is dominated by family owned forests. In Southern Finland forests have been managed dominantly for timber production. In this situation, establishing large continuous protection areas was considered to be challenging. The development was also affected by the experiences gained in Natura 2000 process, where the top-down approach and poor informing of forest owners led to conflicts. As a whole, state authorities were active in driving and developing new and more acceptable solutions. However, the nature value bargaining was an innovation that was developed in regional level (South-Western part of Finland, Satakunta) and it was piloted when the instruments for the METSO programme were tested during the pilot phase 2002-2007. After the pilot phase, the METSO programme was launched in 2008, but the nature value bargaining was not among the instruments anymore.

CONTRACT

Public-private contract Forest owners receive subsidy from stateorganization, namely Forest Centre.

Contract conclusion:

Written agreement



Payment mechanism: Incentive payments



Financing party: Government (without EU-funding)

Length of participation

in scheme: typically 10, but can be also up to 20 years



Start of the scheme: 2002 End of pilot phase: 2007

Context features

Data and Facts - Contract

Participation: In Nature Value Bargaining 356 owners (3700 ha) offered areas from their forests. After examining the offered areas, contracts were made with 158 owners, resulting in 1520 ha of temporarily protected area (average size about 9 ha).

Involved parties: The direct contract parties are the forest owner and the state authority with whom he makes the contract. In addition, in the pilot project in which this instrument was tested, the forest owners committed to give information to related research project(s), that studied the characteristics and efficiency of the mechanism. In addition, the forest owners could ask advice e.g. from Forest Management Associations, that are advising forest owners in their forest management decision-making and operations.

Management requirements for forest owners: The forest areas that were contracted needed to meet certain characteristics. The offered areas were inventoried by forest/biology professionals. First, the forest area in question was required to represent certain important habitat types (groves, forests with considerable amounts of dead wood component, forests located near small water bodies, certain peatland habitats, traditional biotopes (altogether 11). In addition the forests presenting these habitats needed to contain certain structural characteristics that were important and predefined too. Finally, the price demand from the owner and the willingness to pay from authority needed to meet.

Controls/monitoring: Regional Forest Centre monitored that the characteristics of the protected forests were not damaged.

Conditions of participation: Single forest owner was enough for participation. There was flexibility regarding the characteristics of forest areas that could be accepted for the contract. When the contract was made, it clearly defined the conditions under which the contract could be terminated and what was the process if the land was transferred (sold, inherited) to new owner.

Risk/uncertainties of participants: There were only low risks for forest owners since the state paid the whole sum immediately after the contract was signed. Forest owners also had rights to remove dead trees from the protected forest, if a threshold was exceeded (e.g. > 20 trees/ha), which decreased the risks for insect damages.

Links to other contractual relationships: No, selling the forest holding was possible, but the responsibilities of the contract were transferred to new owner.

Funding/Payments: The funding for the nature value bargaining came from state budget. The actual funding organization was state organization, namely regional Forestry Centre or Environmental Centre. A single farmer made a contract with the Forestry Centre or Environmental Centre and then received the payment. The level of payment was defined in negotiation process between authority and farmer, and it depended on the biodiversity values of the stand, opportunity costs as well as farmer's objectives (nature oriented farmers could demand smaller payment).

Landscape and climate: The two regions (Satakunta and Varsinais-Suomi) are characterized by twofold climate: On one hand, the proximity to sea affects the climate. Winters are short and relatively warm, whereas autumn period can be rather long and moist. The average annual temperatures vary from +3°C (North-Eastern Satakunta) to +6°C (archipelago). The areas are among the best agricultural regions in Finland, due to long growing periods (the annual temperature sum varies from 1100 (only in limited Nort-Eastern part) up to 1450. In the most fertile forests in these regions, one can find, in addition to typical boreal tree species (Scots pine, Norway spruce, birch) also some nice deciduous trees like oaks, maples as well as alders. The landscapes are rather flat in Southern and Western parts of the area, which is one factor that improves their properties for agriculture. When going towards North-Eastern parts of both regions, one can find some (not very high) hills and upland areas.

Forest holding structure: In the South-West of Finland the average size of privately owned forest property is 30 hectares. In these forests, the prevailing forest management strategy is even-aged management, although the forest ownership goals and management intensities of forest vary between owners.







SUCCESS OR FAILURE?

The solution, per se, was a success. It attracted considerable number of forest owners to participate in the contract during the pilot period. It would have allowed more cost-efficient biodiversity protection that takes into account the forest ownership objectives in the definition of the payment. However, due to EU regulations, which prevented paying subsidies that were based on production of natural values, it needed to be abandoned, resulting in failure.

SWOT analysis

Main Strengths

1. Instrument was voluntary to forest owners

2. Solution to a situation, where all actors were disappointed from experiences related to Natura 2000 process

3. Was tested in relatively large pilot project, which included active role of research together with other actors.

Main Weaknesses

1. Scattered solution (small protection areas located more-or-less randomly in the landscape)

Main Opportunities

1. Cost-efficient: nature oriented forest owners have lower subsidy demands

2. Increased legitimacy of biodiversity protection among all actors (landowners, forestry professionals)

Main Threats

1. The supply defines what areas will be protected – not the most valuable ones

 Temporary protection does not guarantee long-term solution

3. EU-legislation didn't match with the characteristics of the tool – it needed to be abandoned – resulting in FAILURE



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