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Natural grazing in Maramures

Harvesting of wilderness meat as a driver for conservation of
landscapes and biodiversity

FINANCE AND BUDGET

Stroming and Stichting Ark



In collaboration with
wwf-Danube Carpatian Programme Office/
wwf-One Europe More Nature
Commissioned by wwf-Netherlands

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Introduction

In June 2006 a field trip was undertaken to investigate possibilities for large scale extensive grazing and meat harvesting in Mara Mures. It appeared real possibilities are there: suitable areas exist and current users and owners are eager to cooperate. The recommendation therefore was to start one or two pilots ('Natural Grazing in Maramures – harvesting of wilderness meat as a driver for conservation of landscapes and biodiversity (2006).')

The document in front of you describes the financial aspects of setting up these pilots in very broad terms, in order to explore

- whether natural grazing and meat harvesting could be economically self-sufficient in the long run
- what kind of start-up investment would be needed to start one or two pilots.

The basis of our calculation is our recommendation that each pilot be given 5 years to establish itself and become self-sufficient in economic terms. In the calculations below we work with figures provided by the various people met. These figures refer to current meat prices (live animals) under current supply conditions (small quantities, irregular supply).

YEAR 1 TO 5

In order to get some insight into the question whether natural grazing and meat harvesting can become self-sufficient we calculate for a pilot starting with 225 animals.

For the herd we assume that:

- a Mara Brown costs € 600;
- the herd of 225 animals is provided 'for free' to the project by a donor. After the start up period of 5 years, the project will pay this 'loan' back in kind, so the donor will receive 225 animals back (e.g. for use in another project);
- the donor will not finance the herd directly but will attract a bank loan against an interest rate of 7%. This not only will bring down the level of initial direct funding needed (e.g. a grant), but more importantly will ensure that commercial thinking is integrated within the project right from the start. After all the project should not be 'grant-driven' and collapse as soon as external funding ceases. It is recommended that the loan is attracted from a 'green bank' (like Triodos or AS N in the Netherlands), to help ensure that the economic perspective will not dominate the ecological and social side of it. Green bank funding will also signal that the project (and meat) is an ecologically sound.

In this way a start up herd would cost approximately € 9500 annually (7% x € 600 x 225 animals), or roughly € 50 000 over a period of 5 years.

Other large investments:

- a shelter for the winter time. This has been estimated by a local expert at roughly € 15 000. Another figure provided is much higher and calculates with 7-8 m² per animal (225 animals x 8 sqm = 1800 sqm of construction x 200€/sqm of construction = 360 000 €).
- winter food. The price of hay is high (although figures provided to us varied considerably). However, we assume that this winter fodder is provided to the project, as an investment in kind, by the participating farmers. During our field visit we have asked whether people would be prepared to do this and the answer was positive, as long as there is the perspective of making a profit
- a local project leader with entrepreneurial skills and external technical support to develop the project further and pull the project off the ground
- herdsman: the costs of a herdsman are € 225 per month.

Smaller investments

- veterinary care, administration and registration costs, transport to the slaughter house all require relatively small amounts and have been lumped together in a 15% miscellaneous/unforeseen budget line
- predator loss insurance fund: for awareness and strategic reasons we recommend that an insurance fund be established to cover the loss to predators (estimated at 5% of the population annually). So the cost would be 5% x 225 animals x € 600 = € 6 750 annually or roughly 35 000 over 5 years.

The cost of refrigerators and other technical equipment/measures to ensure a hygienic transport and sales of the meat is left out of the equation because this is the responsibility of the slaughter house, which – just like in the current situation – will take these costs into account when calculating the price at which it buys and sells the meat. There is a certain interest of one slaughter house from Baia Mare (GELSOR) to process and prepare local products from this wilderness meat.

With regard to income our assumption is that the 'wilderness meat' generated by the project will initially be sold to the slaughterhouse for the same price as normal meat. This is 43 000 LEI (€1.25) per kg (live animal). A calf weighs some 360 kg so would sell at 360 x 1.25 = € 450. The 112 females (50% of a natural herd of 225 animals) on average produce 0.6 calf annually. If all of these calves are sold the revenue is € 450 x 0.6 x 112 = € 30 000 annually, i.e. € 150 000 over 5 years.

We assume that initially no extra money is generated for the project through sales of skins, handicrafts, extra tourism, direct sales of meat etc. All these extra sources of income could be realistically developed, but we cannot put figures to them at this stage. Therefore our estimate of revenue is conservative.

Finally, at the end of the project, the loan of 225 animals has to be paid back to the donor. This represents a reduction in revenue over the first 5 years of roughly € 100 000 (225 animals x € 450).

With these assumptions the -back of -the envelope calculation is as follows:

COST <i>rounded figures in euro's, spread over 5 years</i>	
Start up herd	50 000
Winter shelter	15 000*)
Project leader with working budget	125 000
Capacity building/technical support	175 000
Predator loss insurance fund	35 000
SUBTOTAL	400 000
Miscellaneous/unforeseen	60 000
TOTAL GROSS COST (over 5 years)	460 000
*) <i>although this figure was provided to us. Later on much higher estimates reached us. Futher investigation is necessary.</i>	

REVENUE <i>rounded figures in euro's, spread over 5 years</i>	
Sales of meat	150 000
Pay-back of 225 animals	- 100 000
REVENUE after pay back (over 5 years)	50 000

This shows that the start up will need external funding to the tune of roughly € 400 000 (€ 80 000 annually). If the winter shelter is indeed more expensive than the € 15000 initially mentioned to us, this extra amount should be added (so external start-up funding would be € 400 000 + extra cost for the shelter). It would however have little impact on the economic perspective for years 5 – 10, except maybe for somewhat higher maintenance costs for the shelter.

YEAR 5 TO 10

In the second five year period the financial picture is much more positive. The initial costs of the herd and the winter shelter no longer are part of the budget and the need for technical support and the time investment of the project leader can be much less (the project leader would be freed up to set up other projects)

<i>COST rounded figures in euro's, spread over 5 years</i>	
Start up herd	n.a.
Winter shelter	n.a.
Project leader with working budget	15 000
Capacity building/technical support	25 000
Predator loss insurance fund	35 000
SUBTOTAL	75 000
Miscellaneous/unforeseen	15 000
TOTAL GROSS COST (over 5 years)	90 000
*) although this figure was provided to us. Later on much higher estimates reached us. Futher investigation is necessary.	

<i>REVENUE rounded figures in euro's, spread over 5 years</i>	
Sales of meat	150 000
Pay-back of 225 animals	n.a.
TOTAL REVENUE	150 000

This shows that the project will generate € 60 000 in the second 5 years. Certainly for this second period this is a conservative estimate because by then some of the possibilities to generate extra income must have been developed.

Working from this calculation and assuming an estimated average income in Romania amounts to € 1500 per year, a project like this could provide a 100% income to 8 people (or families) from meat harvesting alone. Extra revenue (profits) can be generated from either the meat or from indirect sources like tourism. We are convinced that in the end the second offers the best possibilities, certainly in Maramures with its rich cultural heritage (in fact tourists are already discovering the area). In order for the association to not just provide the landscape that brings tourists, but to also benefit from this, it should over time also explore these other possible sources of income or seek cooperation with organisations which are already working in e.g. tourism.

The basis for such the project is that the association owns the cattle. The cattle does not only provide meat, but also horns and leather which can be made into souvenirs. In parallel to this different types of accommodation and tourist programmes should be stimulated (visit to the herds and the guardsmen; helping the guardsmen; biodiversity-tours, etc). Within the framework of this feasibility study we did not go into this so we limit ourselves to some last points on the economic possibilities for meat harvesting itself.

The price for beef in the shops in and around Baia Mare is 4 times higher than that paid to farmers for live animals. This, according to the agricultural institute LEI, Netherlands (verbal communications) is a big difference and certainly offers opportunities to get a better price for farmers. On top of that the special quality of 'wilderness meat' could create extra revenue. Direct sales for part of the meat (e.g. to hotels and restaurants) could generate even better prices. And on top of that comes of course the economy of scale – hence our recommendation to start with at least 225 animals and hence our recommendation for an association. Crucial is that an entrepreneurial project developer/project leader (a 'quarter maker') is employed to further develop the project, both the natural grazing part (with tourism aspects as well) as well as the meat harvesting/marketing. This quarter maker should at least in the beginning receive technical support from 'the West', given the lack of experience in Romania with this type of business.

We feel that with an investment of 400 000 Euro spread over 5 years a pilot with a herd of 225 animals could start and become self sufficient as of year 6. Annual direct profit against the current price levels (so without the added extra's from special deals, certificates etc.) would be around 10 000-15 000 Euro annually.

Since one 'quarter maker' could cover more pilots and also costs for technical support would stay almost the same, the initial cost for starting two pilots is only slightly higher (some 475 000 Euro for 2 projects, spread over 5 years). These investments would include 'generating' a herd of 225 (resp. 450) animals with which subsequent projects could be started elsewhere after the first 5 years.

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PUBLICATION
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Postbus 31070
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DESIGN Brigitte Slangen
LAY-OUT Franka van Loon
PRINT XXL-Press Nijmegen
ILLUSTRATIONS
Jeroen Helmer (Stichting Ark)
PHOTO'S Alphons van Winden,
Wim Braakhekke, Twan Teunissen,
Gerard Litjens, www.wildernisfoto.nl

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