

THE FALLOW MODEL IN WONDER LANDSCAPE

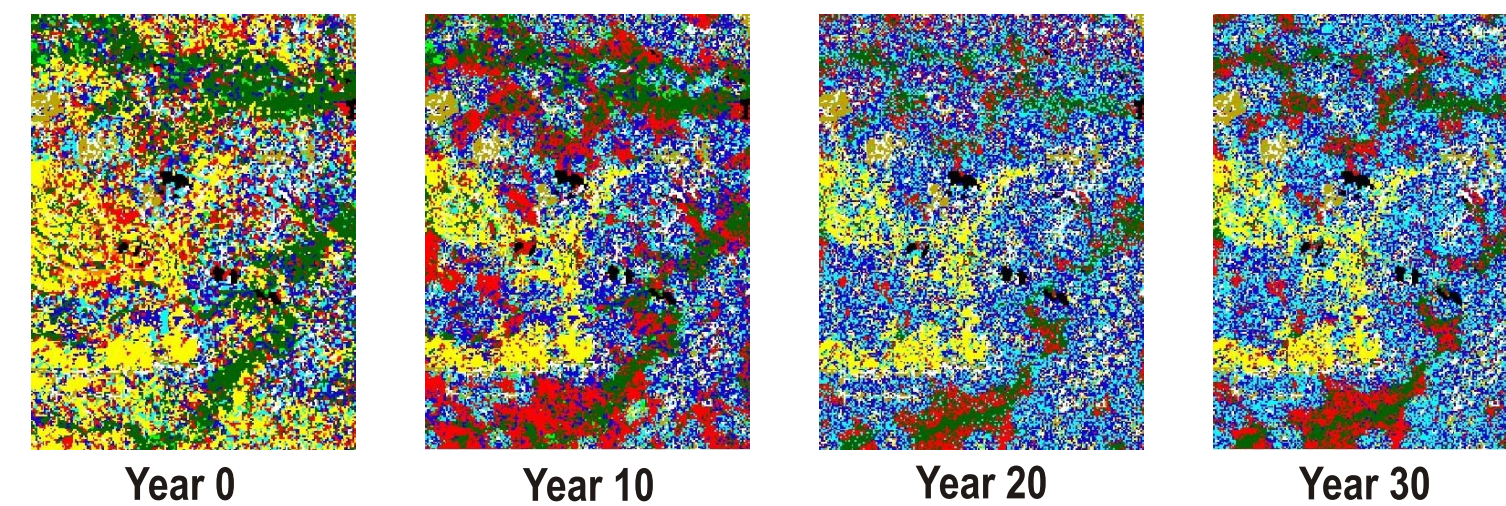
CAN WE PROSPECT THE 'FUTURE' OF OUR LANDSCAPE BEFORE OUR SOCIETY CHOOSE TO COLLAPSE?



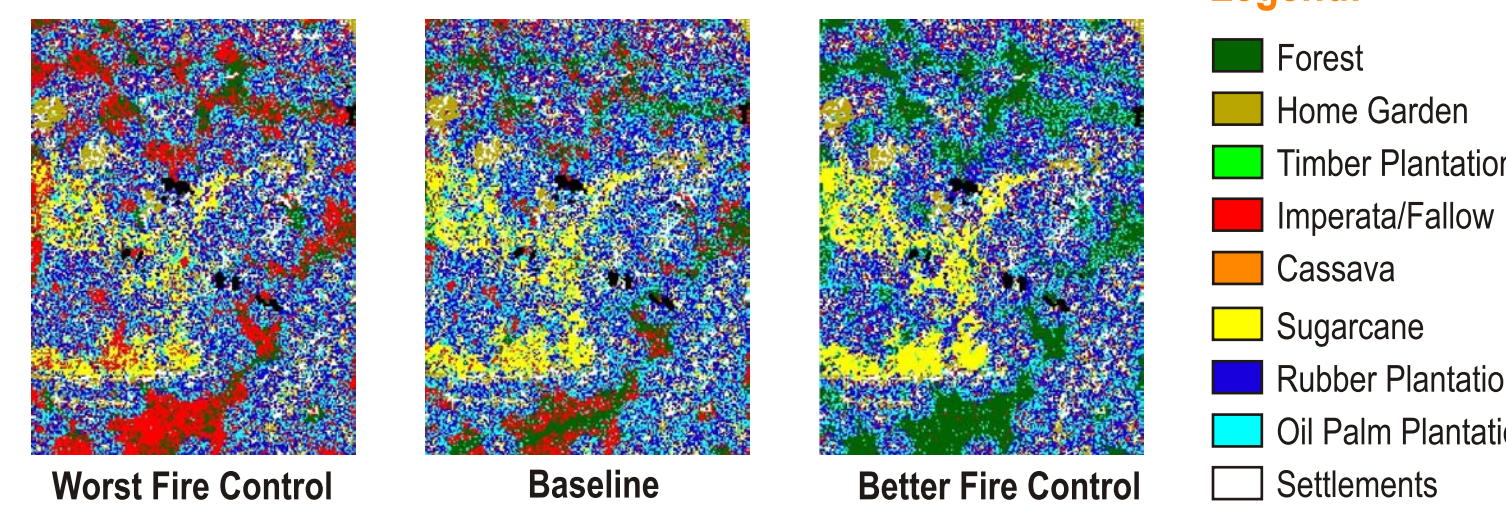
RURAL LANDSCAPES of Southeast Asia have developed from a basis of 'shifting cultivation' and fallow-crop rotations into a diverse mosaic of Agroforestry Systems, forest patches used for non-timber products as well as timber harvesting, economic system of the surrounding permanent cropping, and fire-climax Imperata grasslands. The agents of change are the farmers who make their strategic decisions on land use patterns and tactical decisions on labour allocations, both likely to be based on the results to obtain, and strongly conditioned by capital availability.

They expect gradually change on the basis of local experience, and are influenced by external information sources (knowledge diffusion from elsewhere, 'extension' or the priming of expectations for land use practices that are not yet idespread). At the local community scale, specific restrictions on land use options are set, and issues such as fire control are determined by the cohesiveness of the local community. Prices of the various commodities and their volatility are determined by the surrounding economy, as does the wage rate for off-farm and out-of-the landscape labour opportunities.

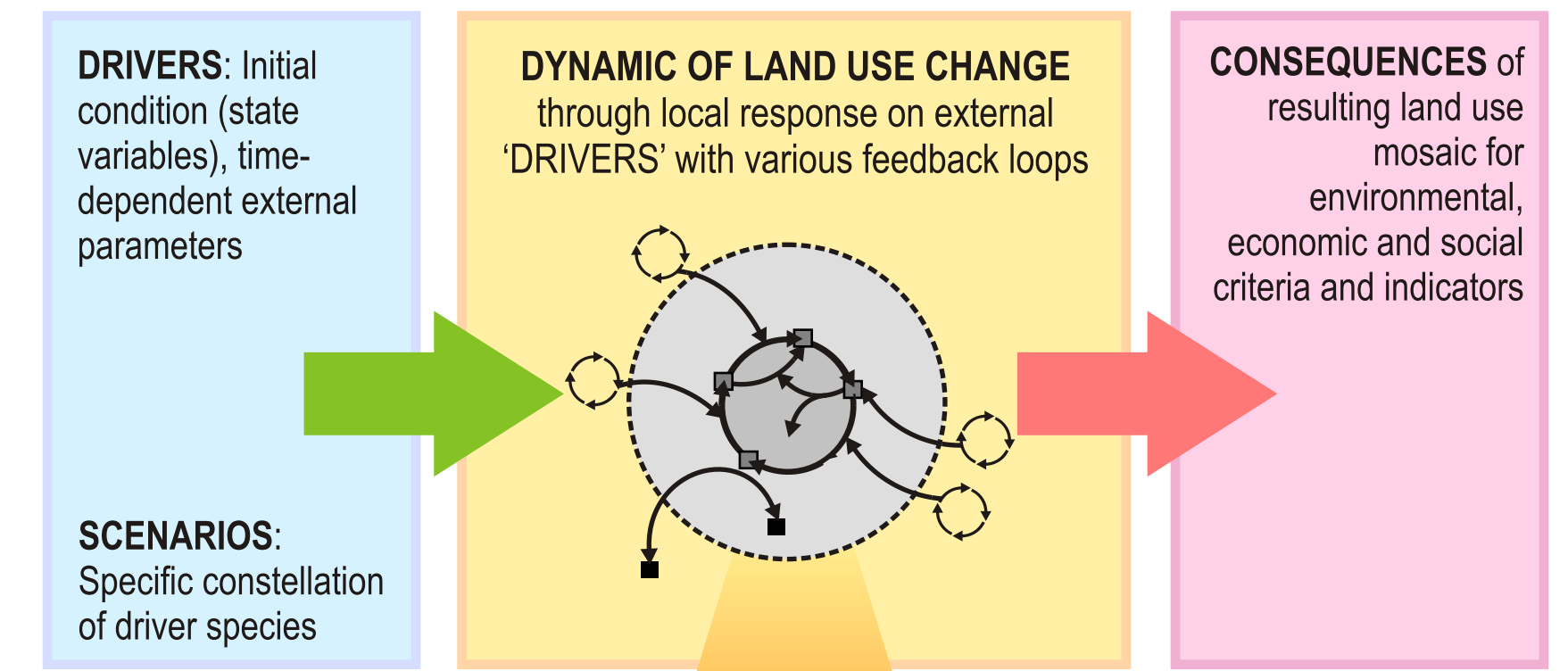
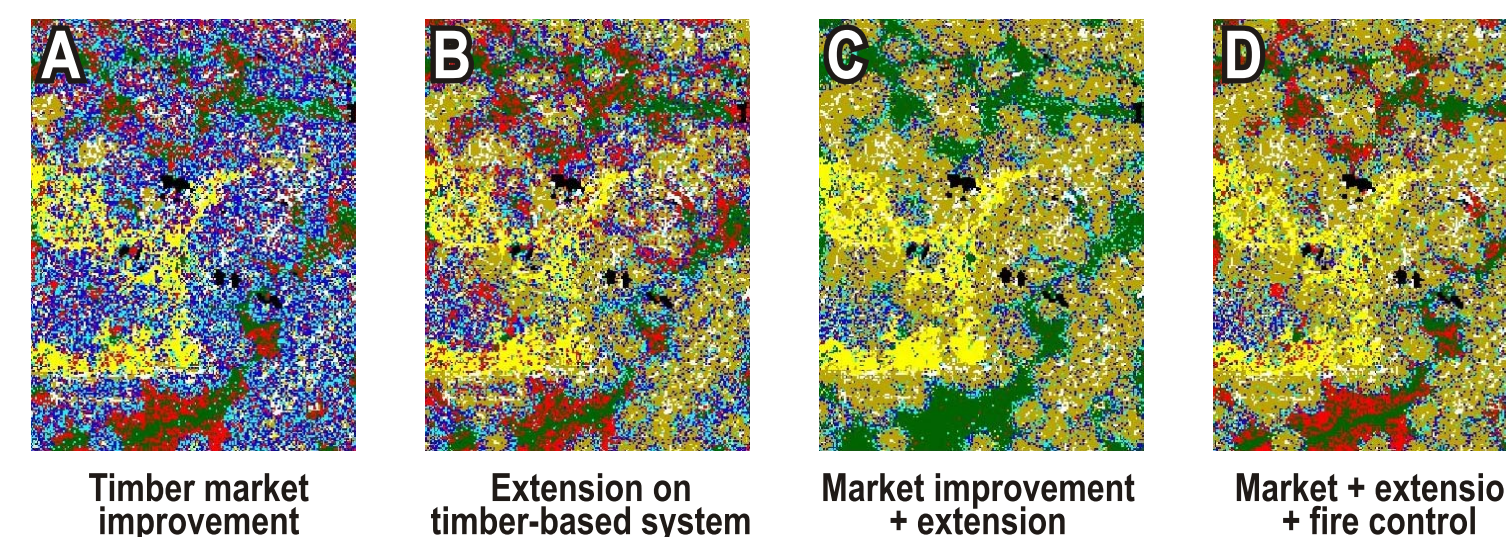
BASELINE PROSPECT FOR A 600 KM² AREA IN NORTH LAMPUNG, INDONESIA



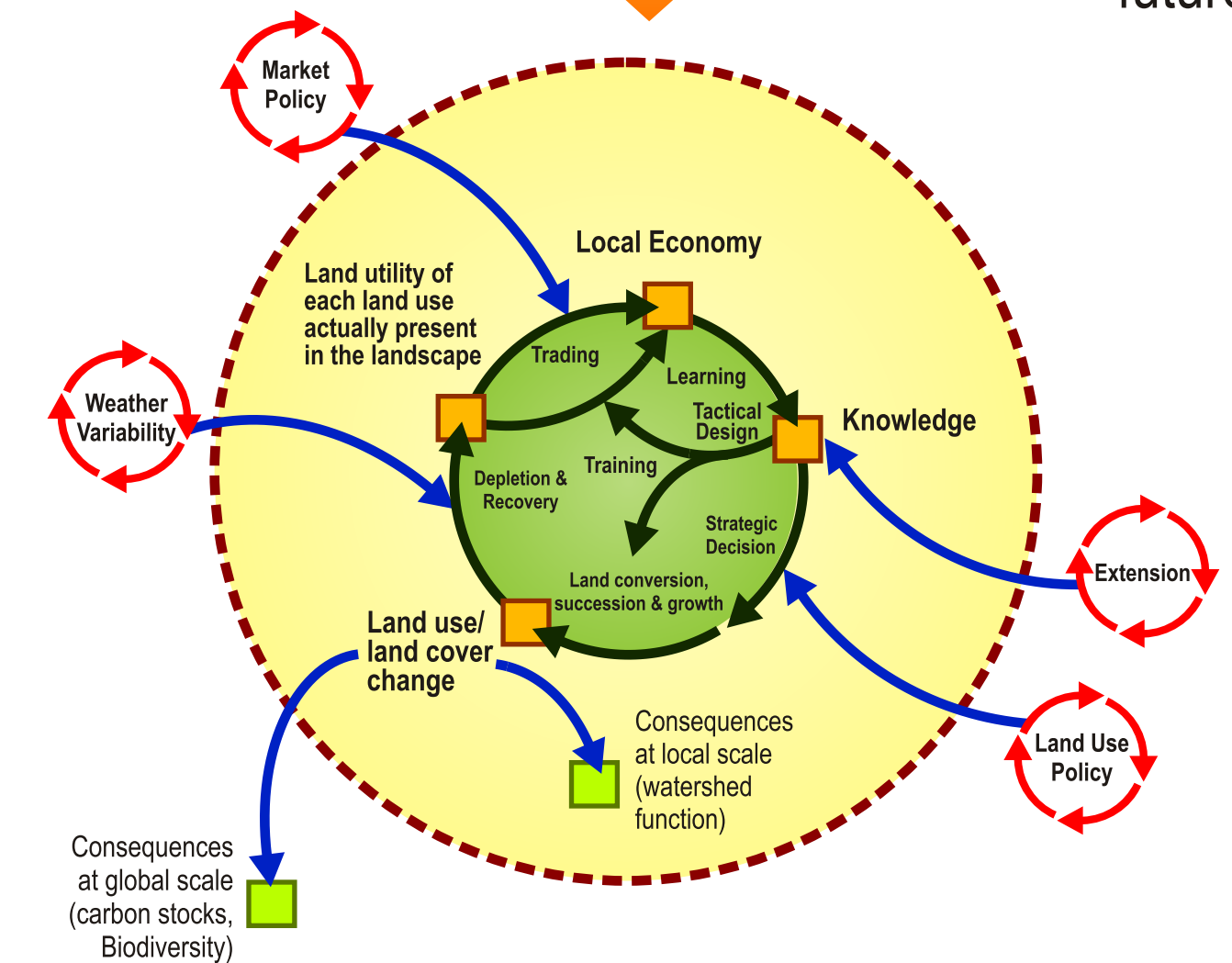
PROSPECT OF BETTER FIRE CONTROL



PROSPECT OF SMALLHOLDER TIMBER ADOPTION



The FALLOW Model is aimed as a prospection tool, not a prediction tool, to provide foresight of drivers' changes, reveal the implications of baseline trajectories, and illuminate options for 'future' action



The overall outcome of the dynamic land use mosaic determines the amount of biomass and carbon stocks of the landscape, the way incoming rainfall is processed into riverflow and the opportunities for flora and fauna of pioneer-to-late successional species.

The FALLOW model was designed to provide a comprehensive description of the factors and interactions described above, to allow the testing of hypotheses about 'causal' explanations (including the various direct and indirect feedbacks) and to evaluate 'scenarios' of 'baseline' and policy-change land use evolution. Baselines are important in the discussion of 'environmental service rewards', while the likely response to 'rewards' can include 'perverse incentives' and 'leakage', if additional capital relieves constraints to the development of less-environmental friendly land use options.



Designed by: Anggoro Santoso
 Photos by: Andree Ekadinata (Landscape of Muara Sungkai), Beria Leimona (Farmers of Sumber Jaya)