IUFRO

THÜNEN

A global online survey on forest adaptation and forest restoration - concept and first results

Markus Höhl, Andreas Bolte & IUFRO TF 31 Forest Adaptation and Restoration Under Global Change

Mission

- Collect data on local experiences with Adaptive Forest Management (AFM) and Forest Landscape Restoration (FLR) globally (Fig 1. & Fig. 2)
- Compilation of expert knowledge as basis for best practice approaches to aid decision-making processes on the local, regional and international level
- Assist forest managers and decision makers in the task of increasing the adaptive capacity of forests by providing information about Adaptive Measures (AM) such as AFM and FLR (Fig 2)

Early Results

- So far 28 participants worldwide (Fig. 1)
- Climate change as most important underlying cause for initiation of AM (Fig. 3)
- Degradation, protecting ecosystem services & biodiversity and vulnerability to disease were decisive for the initiation of AM(Fig. 4)
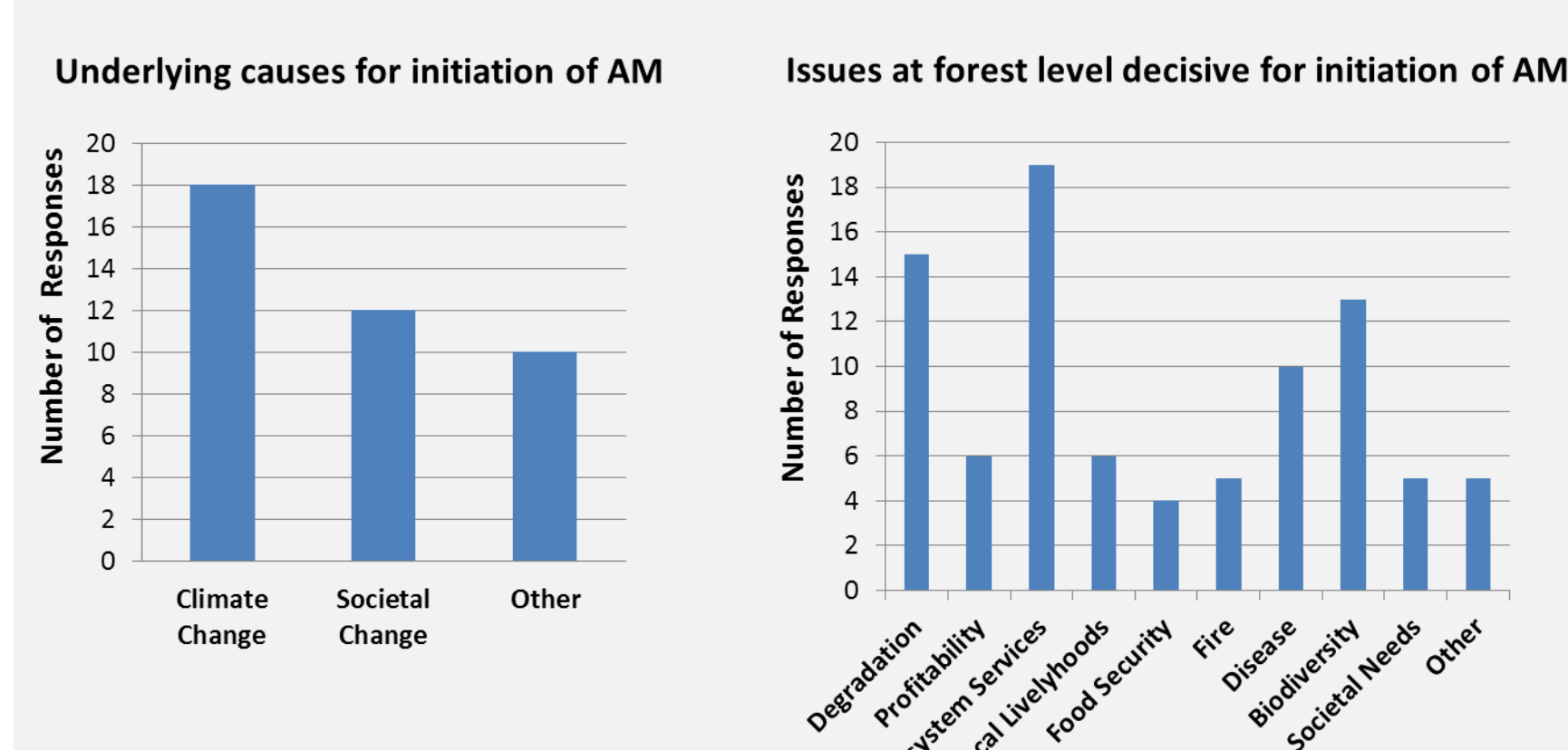

Fig. 3 (left): Underlying causes for initiation of AM as identified by participants
Fig. 4 (right): Issues at forest / stand level which led to initiation of AM

Online Survey

- Designed to gather information on real-world AFM and FLR activities
- Collects data on location, actors environmental- and forest conditions, management regimes, implementation, targets, and success factors
- Global applicability through standardized design and the use of multiple languages (English, Chinese, French, German, Italian, Polish, Russian, Spanish, and Turkish + more to come)
- Spatial database for regionalized analysis, mapping and data integration
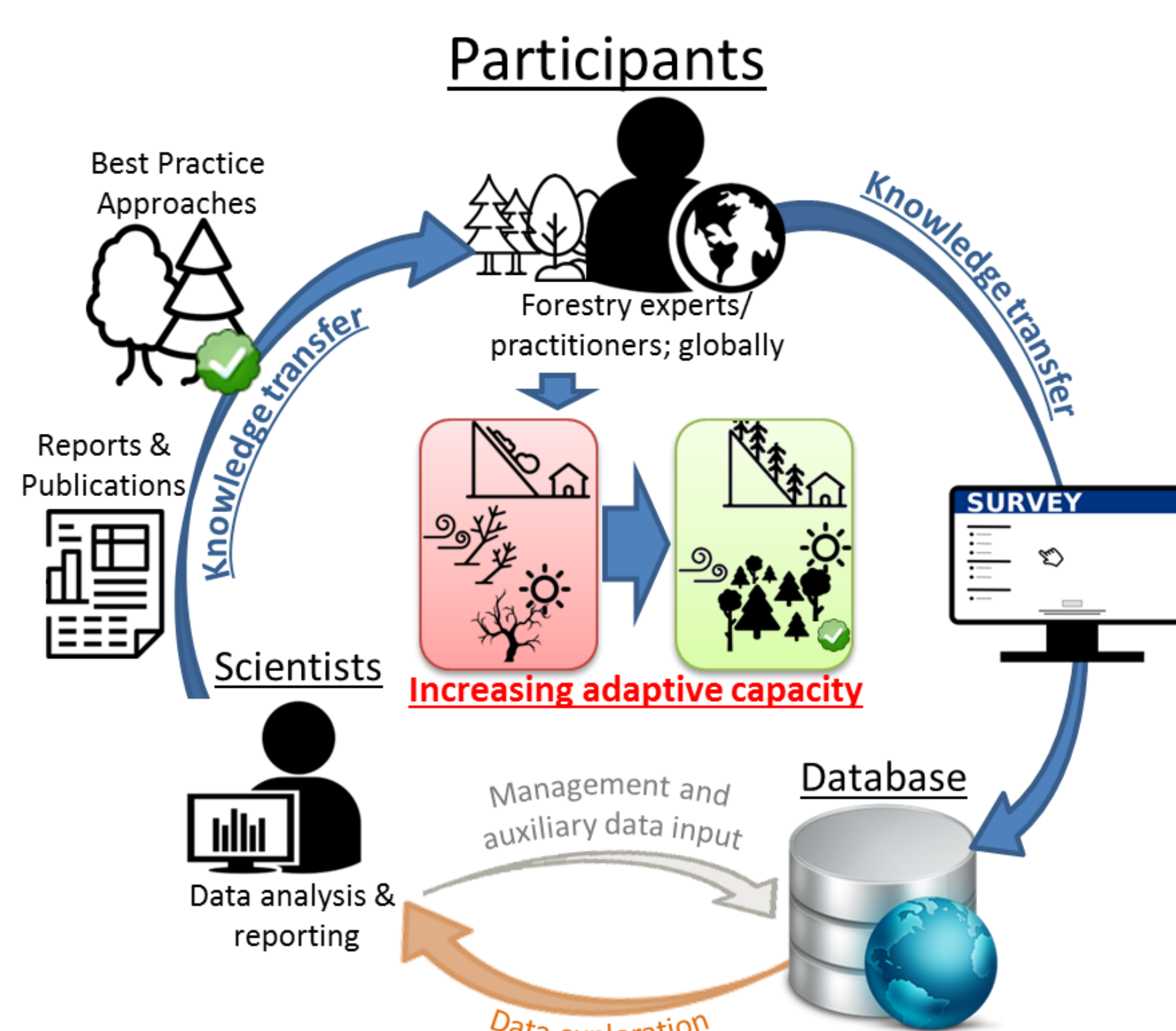- See schema of information flow below:

Fig. 2: Illustration of project information flow

Contribute your knowledge

This survey relies on the knowledge of forestry experts/professionals and their information about actual examples of AM. Thus your expertise can enhance our understanding of AM and benefit the overall objective to increase the adaptive capacity of the world's forests. The map below shows AM activities already included in our research, we would highly appreciate if you add the project(s) you know about by participating in the survey.

Fig. 1: Map of AM project locations from survey

To participate in the survey you can:
- go to this link (also on our website): http://gdi.thuenen.de/wo/limesurvey/index.php/883655?lang=en
- take a business card containing the link
- use this QR code to get to the survey:

- A variety of silvicultural measures (often in combination) were taken as part of the AM (Fig. 5)
- In most cases local provenances of native trees were promoted, sometimes combined with other provenances or non-native trees (Fig. 6)
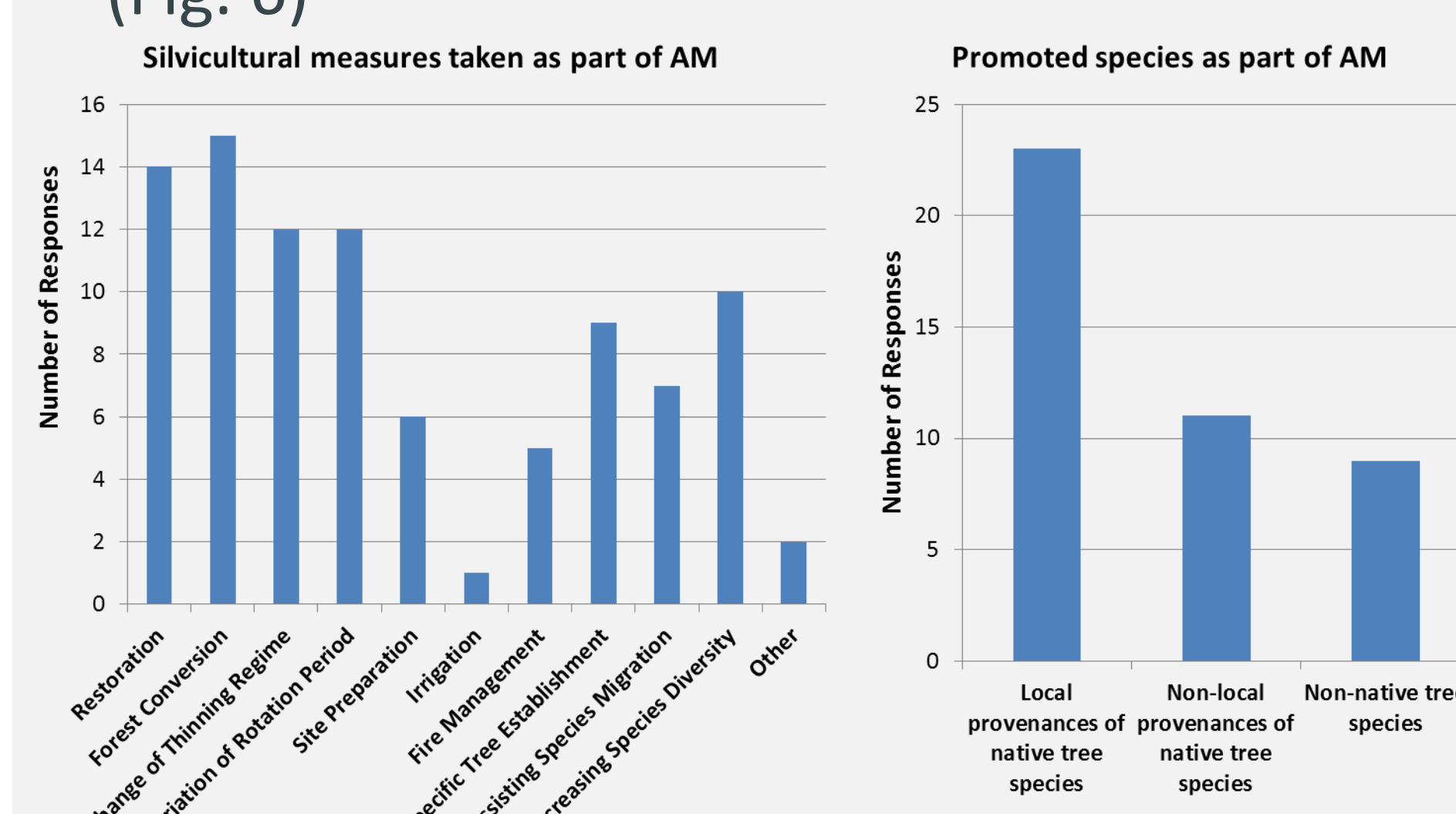

Fig. 5 (left): Silvicultural measures identified as part of the AM by participants
Fig. 6 (right): Promoted species / provenances of AM projects (right)

- Nature- & biodiversity conservation, protection function, water issues, income and forest productivity were rated as priority goals of AM (Fig.7)
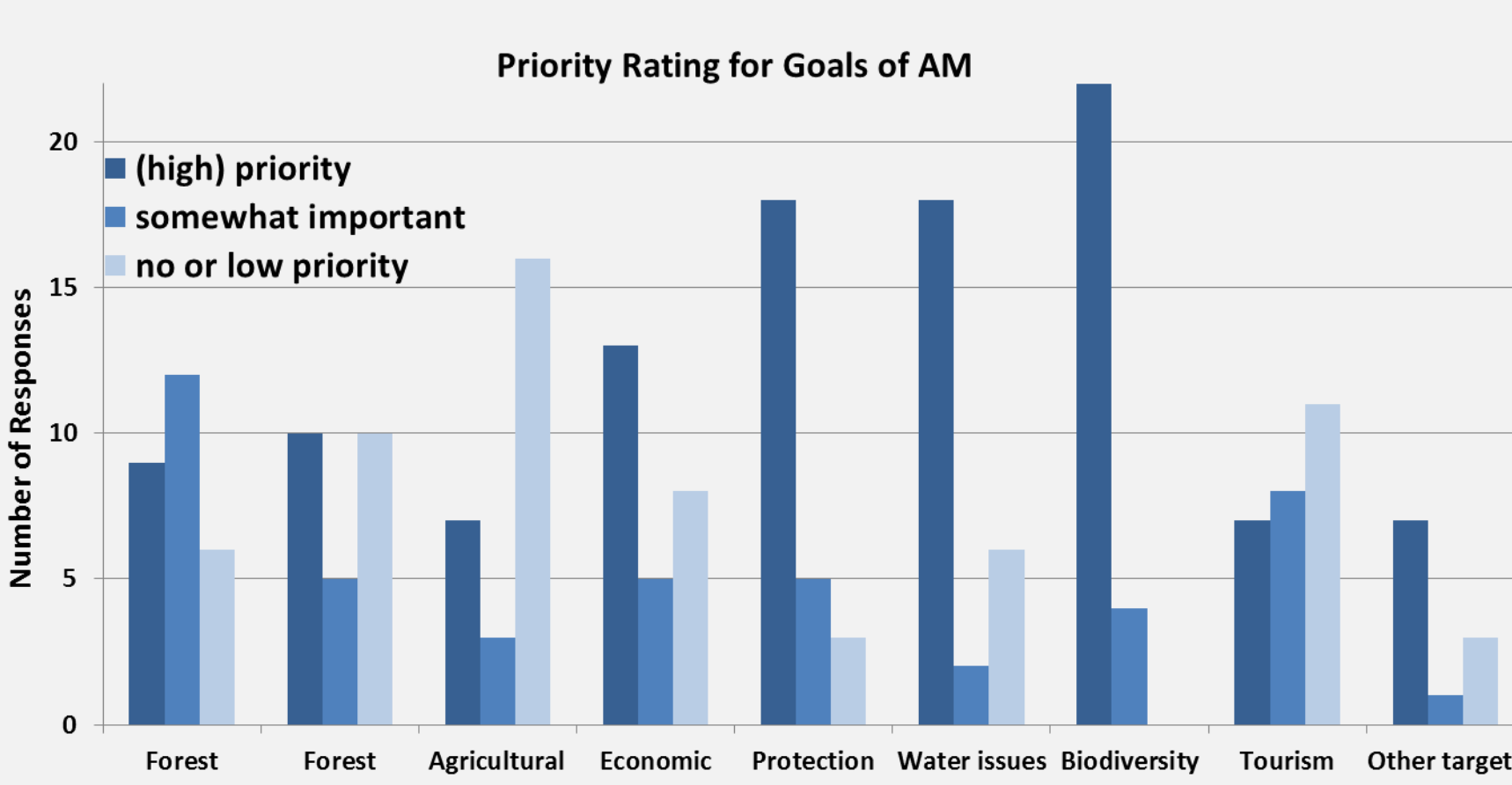

Fig. 7: Priorities of goals of AM rated by the participants

- Participants agreed that the AMs were successful and good examples for other regions. This was enabled through forest management and a good cooperation between authorities and stakeholders (Fig.8)
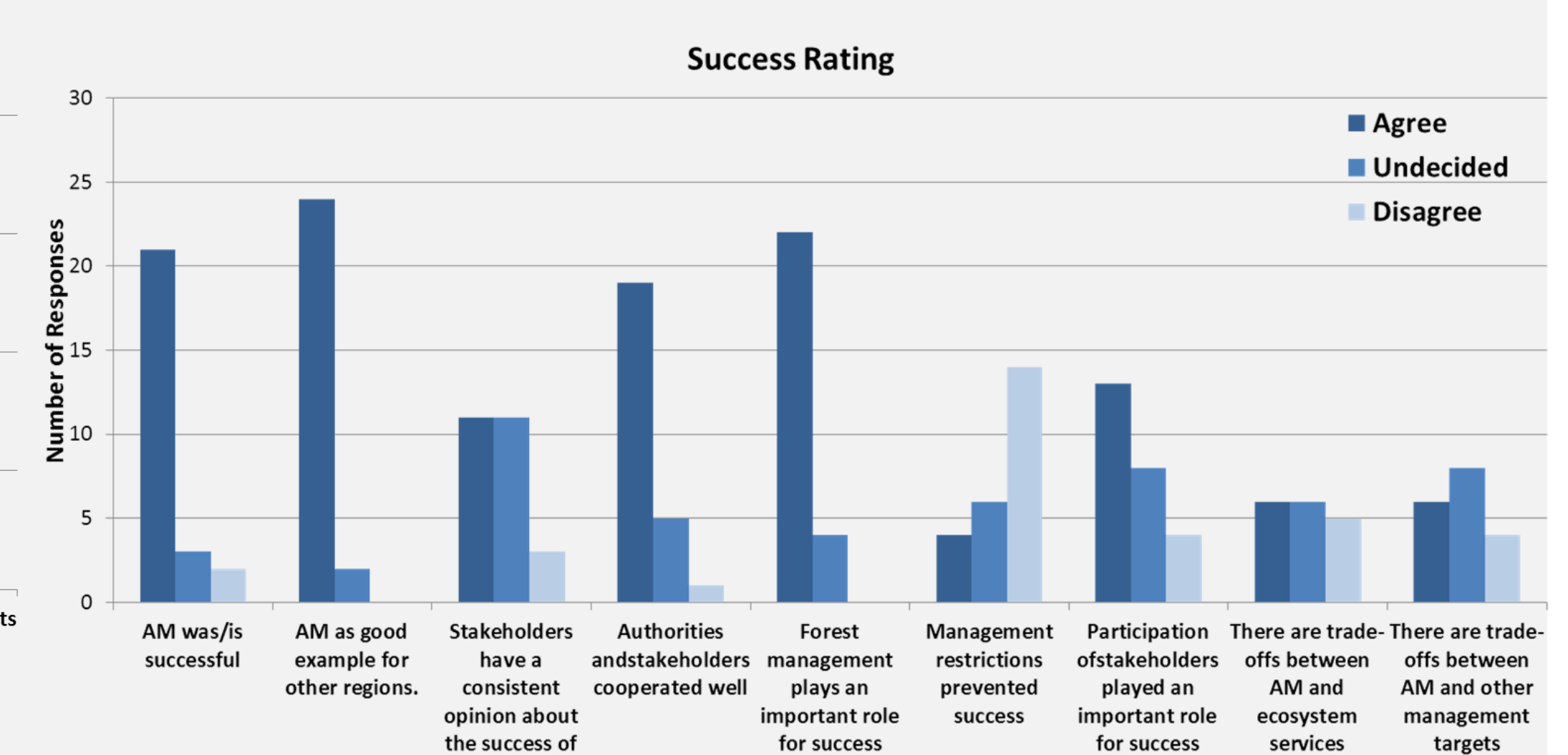

Fig. 8: Success(-factors) rated by participants

THÜNEN