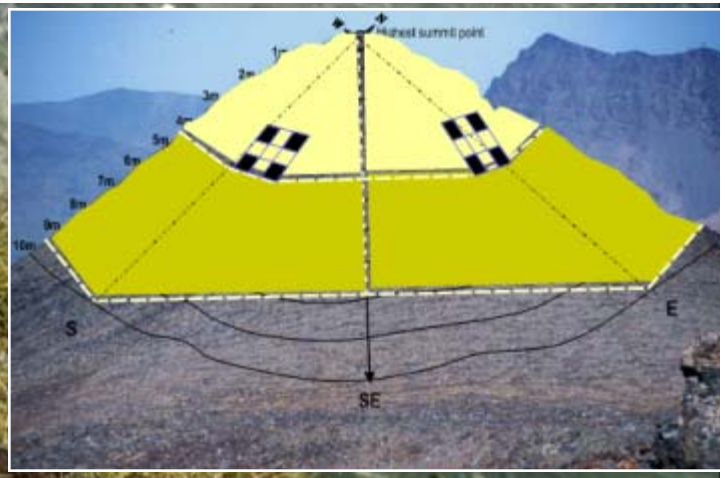
GLORIA - Global Observation Research Initiative in Alpine Environments



Mountain Biodiversity Observatory

GLORIA co-ordination
Dept. of Conservation Biology, Vegetation and Landscape Ecology
University of Vienna, Austria
www.gloria.ac.at

Pristine versus anthrpogenically altered

Pristine (+/-): at high elevations (subnival);
+ some boreal and arctic mts, N-America, New Zealand

Direct human impacts (land use): many European, Asian mts., Andes


Cord. Vilcabamba, Peru


Qionglaishan, Sichuan, CN

Cord. Real, W of Mururata, ca. 4300m, Bolivia

European meadow

Cocuy, ca. 3500m,
Boyacá, Colombia

The inter- and transdisciplinary potential of a focused observation programme/network

MRI/UNESCO global change research strategy through its "feasibility" GLORIA found an unconstrained integration + a model for similar strategies e.g. for montane forests

Through GLORIA's simplicity & large number of sites a good potential for synergistic interaction: LTER, GMBA activities, MIREN, ethnobotany, EEA

GLORIA master sites and additional activities
other organism groups (e.g. arthropods, amphibians)
climatology, vegetation and species modelling ….

A long-term perspective – short-term funding

Slow-growing: intervals of resurvey 5-10 years – long-term operation

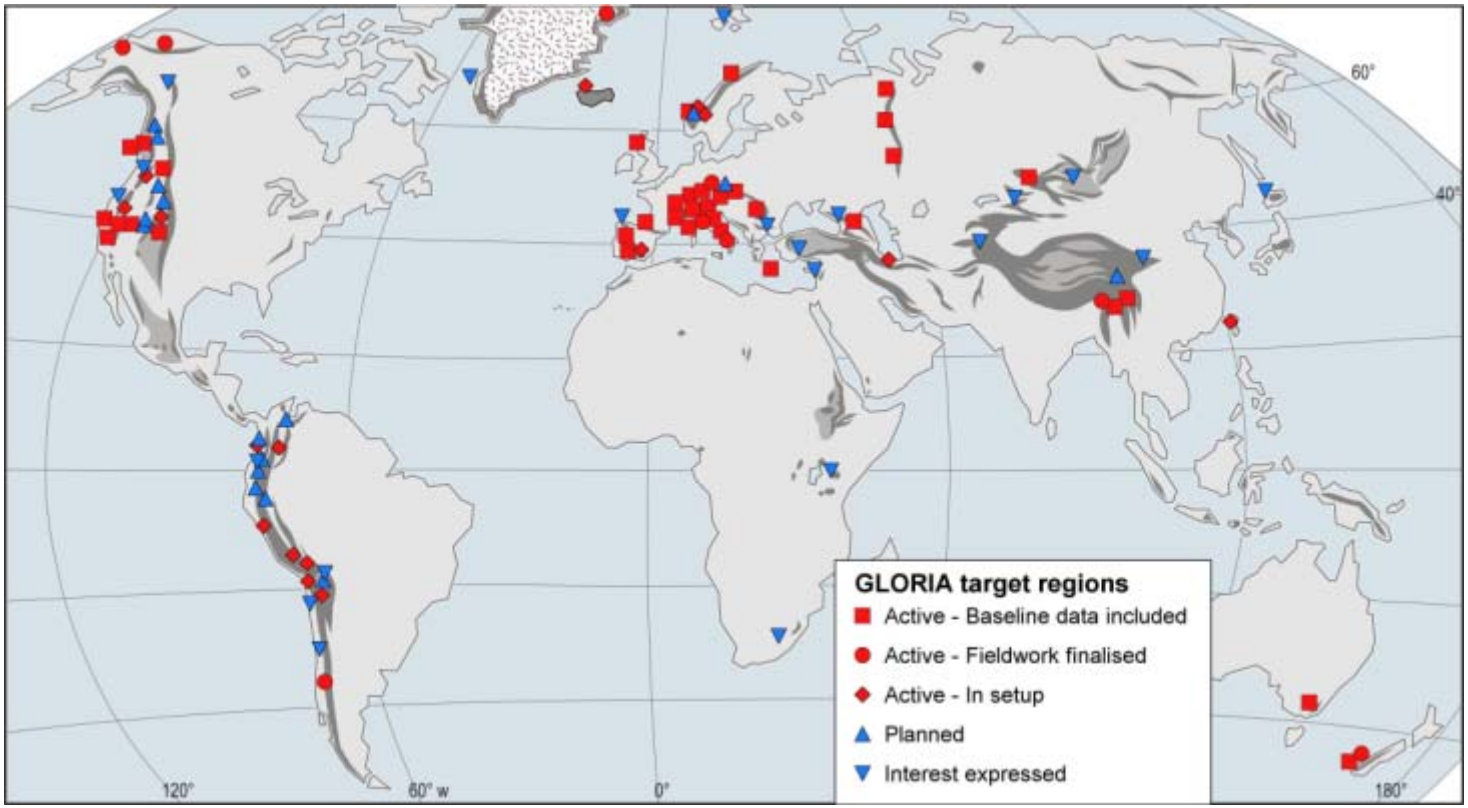
Funding structures usually for short periods

GLORIA is an open process – can be joined at any time: calculability of efforts

GLORIA co-ordination: communication with > 50 groups on standardisation, method advice & training, publication strategy, data ownership issues, central data base and web site, method testing, master sites, PR & policy

The implementation of GLORIA

South America: first sites through UNESCO-MAB: Peru and Chile, now 8 TRs, further 11 are planned (Proyecto Páramo Andino - CONDESAN, Conservation International, Herbario Nat. Bolivia, Com. Andina de Naciones)



Ongoing activities in the HKH region

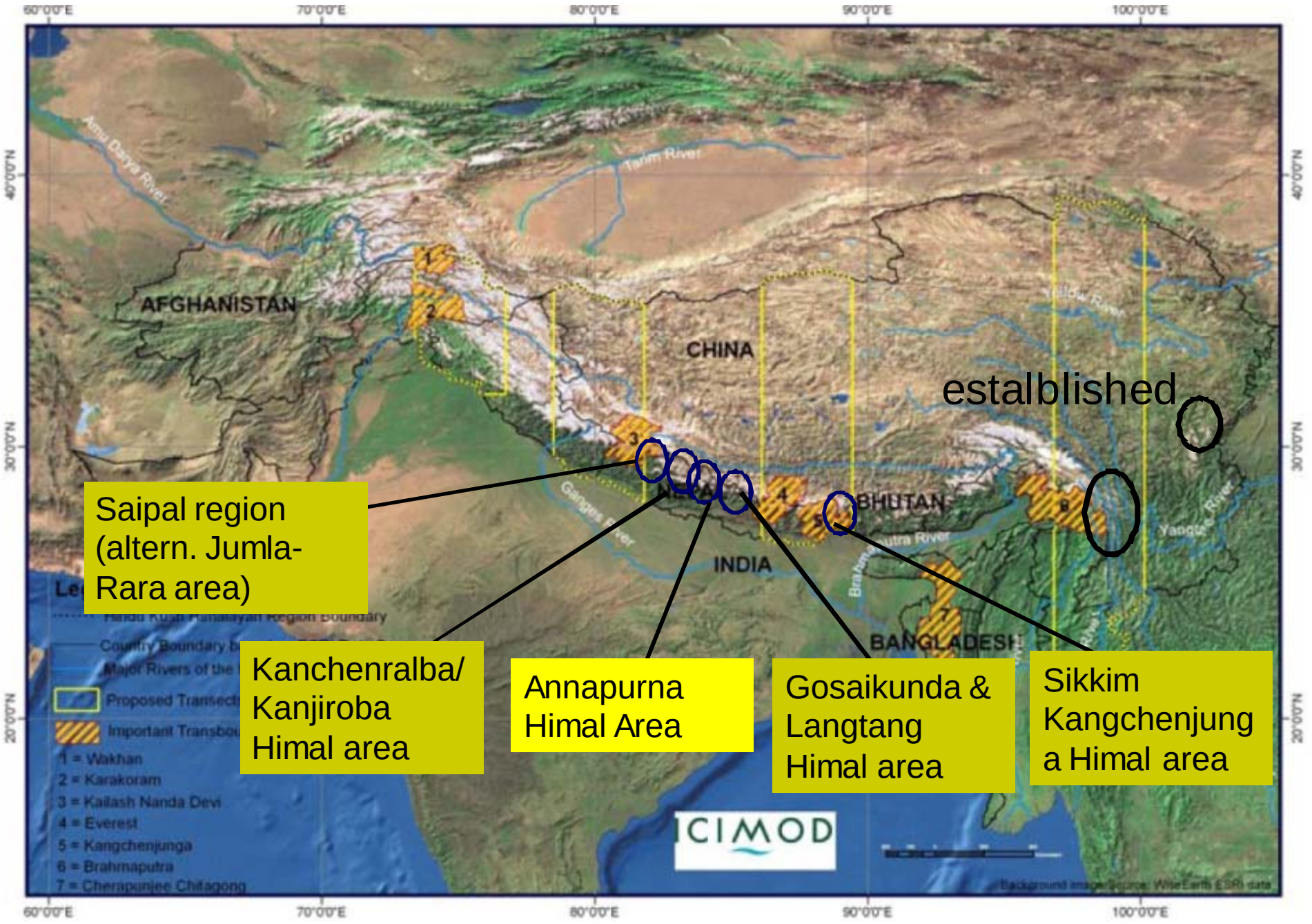
Missouri Botanical Garden and Nepalese partners
(Jan Salick, Suresh Ghimire, Shonil Bhagwat et al.)

W-E arrangement across Nepal to Sikkim, (Bhutan)

later northward in Tibet

Edinburgh Botanical Garden and Nepalese partners
(Colin Pendry, Laszlo Nagy et al.)

Annapurna region (humid S and arid N)



From Chettri, Sharma & Thapa, ICIMOD