

$$\text{Utility } U_i = \overbrace{u_i y}^{\text{Resource}} - \overbrace{(\bar{u} - u_i) \tilde{w}_i}^{\text{Wage}} + \overbrace{(R_i - u_i) \phi}^{\text{Tradable use rights}},$$

$$\dot{u}_i = \frac{dU_i}{du} = y - (\tilde{w}_i + \phi)$$

$$\text{supply} = \max(0, \sum_i R_i - u_i),$$

$$\text{demand} = \sum_i \begin{cases} \min(\dot{u}_i, \bar{u} - (u_i + \dot{u}_i)) & \text{if } \dot{u}_i > 0, \\ 0 & \text{otherwise.} \end{cases}$$

$$\dot{\phi} = \pi(\text{demand} - \text{supply}),$$

$$\text{incentives } \gamma = \tilde{w}_i + \phi$$