Supplementary Figure 4. Local high-yielding varieties in different local conditions enhanced production. (a, c) Correlation analysis of r_{yield} and r_{area} with *yield rate* during 1986-2000 (a) and 2001-2016 (c). (b, d) Multilevel linear regression for *yield rate* by r_{yield} to r_{area} during 1986-2000 (b) and 2001-2016 (d). The 95% confidence intervals (CIs) of the partial regression coefficient are shown. The asterisk is used to represent the significance of the regression coefficient. (***$p<0.001$, $0.001<$**$p<0.01$, $0.01<$*$p<0.05$). (e) Diagram illustrating the cultivation of local high-yielding varieties in different local conditions to increase production. Variety A' yielded 30% more than the control variety C and covered 5% of the total area. Variety B' yielded 40% more than the control variety C and was planted in 5% of the total area. The remaining 85% was planted with variety C. *y* is the average yield of control Variety C. The rice plant as "Created with BioRender.com".