HEAT HAZARDS to HUMAN HEALTH
Focus on Feasible and Sustainable Solutions

PERFORMANCE
(factors affecting)

PRODUCTIVITY

Prevention of POVERTY

HEALTH
Both field and lab studies show that heat stress provokes fatigue
- or force workers to take more frequent and longer breaks!!
Interventions in agriculture

- Baseline: d = 0.60
- White Clothes: d = 0.78
- eCart: d = 1.06
- Ventilated Garments: d = 0.07

Ioannou & Flouris; Heat-Shield work available at www.heat-shield.eu
More focus on day to day recovery/rehydration

~ 70% initiate work with a suboptimal status!!

High prevalence of hypohydration in occupations with heat stress—Perspectives for performance in combined cognitive and motor tasks

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Figure 20. Labour loss (i.e., percentage of work shift time lost due to irregular work breaks) during the baseline assessment and the three interventions used to test different adaptation measures.
Effects on performance/physiological function/strain
Heat, hydration health concerns and considerations

Effects of elevated environmental heat stress

- Increased mortality and morbidity during heat waves is only part of the problem (visible top of the iceberg)
  - Huge “hidden health threat” related to indirect effects on human functioning and productivity
- Future alert systems, prevention plans and analyses of climate change impact should consider – and target both the direct (obvious) and derived factors influencing individual health.