

THE GLOBAL PLANT BIOSECURITY-FOOD SECURITY CHALLENGE: PROTECTING PLANT SYSTEMS TO KEEP PEOPLE HEALTHY

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There are substantial challenges to feeding 9 billion people by 2043 and 10 billion by 2080. The vast majority of calories that sustain humans come directly or indirectly from plants; hence, plant health is prerequisite to human health and wellbeing. Among the most significant challenges are: 1) increasing agricultural production while attaining environmental sustainability, 2) increasing competition over limited water supplies, 3) the global redistribution of plant pathogens and vectors as a consequence of increased global trade, 4) the emergence of new pathogens and new strains of existing pathogens as a consequence of climate change and trade, 5) inadequate global trade policies that compromise plant health in order to facilitate trade, and 6) declining core competencies in the disciplines necessary to address these challenges. Food security is not keeping people alive, it's keeping people healthy. To keep people healthy, we need to keep plant systems healthy. Currently, we do not have the research funding nor the plant health policies necessary to keep 9-10 billion people healthy. Our current global food security strategy is backward thinking; the solution is the problem. We need a realistic global food security strategy and we need to commit the resources necessary to realize that strategy.