Arizona Pest Management Center – COORDINATION Logic Model for Extension IPM

*Coordination is a core resource that supports effective program management of IPM across EIP emphasis areas

Situation	Inputs	Outputs		Outcomes- Impacts		
		Activities	Participation	Short Term Knowledge	Medium Term Behavior	Long Term Long term
1) Few faculty engaged in IPM in a large state, spread across academic depart-ments, counties and campuses 2) Limited and diminishing state Extension resources 3) Highly productive year-round agricultural production and pest issues in agronomic and specialty crops 4) Many students in few school districts focused mainly in urban areas (Phoenix & Tucson) and a need for IPM training to reduce pest & pesticide risks indoors and outdoors 5) Critical need to sustain and expand our capacity to support IPM implementation by diverse stakeholders and to measure outcomes	1) Fully leveraged applied research to support IPM outreach that addresses unique needs of AZ pest managers 2) Stakeholder input on program priorities thru IPM Coordinating Committee (IPM-CC) and other engagements 3) Time and expertise of UA faculty; PDs time invested in APMC coordination 4) Leveraged investments in 5 assistants in extension, IPM Program Mgr. and other shared resources to support IPM outreach, diagnostics and impact assessment 5) IPM Assessment Leadership Team that develops data, tools & approaches to document IPM impacts 6) Existing PSEP program and collabor-ations with state lead agency to reach pesticide applicators 7) Effective ongoing collaborations with regional and national IPM colleagues and Western IPM Center	1) We engage stakeholders to identify needs for IPM research and education (e.g., IPM-CC, Crop Pest Losses workshops, Pesticide Use Database Advisory Comm.) 2) We coordinate Extension IPM planning, communi-cation, transparency, resource development and use, reporting (through IPM-CC and Leadership Teams); centralization of these functions leaves teams to focus on IPM program development and implementation 3) We develop data and resources to measure IPM adoption and outcomes through the IPM Assess-ment Leadership Team 4) We work with and through Leadership Teams to develop and expand IPM resources through grants and other resources 5) We interface with the Western IPM Center, WERA-1017 (IPM), WERA-060 (resistance management), Western IR-4 and other regional and national interest to support and advance the goals of the IPM Roadmap	1) End-users including growers, PCAs, applicators, Ag industry repre-sentatives, school administrators and personnel, urban pest management professionals, landscapers, etc. 2) multi-disciplinary faculty statewide w/ expertise in IPM, entomology, weed science, plant pathology, crop production, turf, horticulture, public health, economics, IPM assessment and other key areas 3) collaborators in AZ, regionally & nationally, including grower groups, scientists, Extension colleagues, regulatory agencies, etc.	Through our increased capacity for IPM engagement and outreach, we increase awareness and technical knowledge to help end-users implement IPM in diverse environments of Arizona; through our investments in IPM assessment we increase our own ability to measure these changes in knowledge in end-users **Possible Measures:** Knowledge and awareness of IPM are most often measured across emphasis areas using interactive audience response surveys implemented at meetings, and in written and online questionnaires	Through our coordinated planning and outreach efforts, clientele across emphasis areas and throughout AZ will adopt IPM practices that reduce economic, human health and environmental risk – such as adoption of reduced risk pesticides and other IPM technologies; Through their increased involvement in IPM assessment efforts, and in-service training we provide, our faculty improve skills and habits for documenting outcomes across all their Extension program efforts **Possible Measures:** Changes in clientele behavior are measured via audience response and other survey techniques implemented at meetings and online (e.g., school district IPM survey implemented annually); Crop Pest Losses surveys and APMC Pesticide Use Database are used to measure changes in local and statewide pesticide use that result from adoption of IPM (see Long Term); Improved program assessment by Extension faculty will be evident on project reports	Our increased capacity to develop and deliver solutions to priority stakeholder IPM needs results in reduced economic risks to growers and others, reduced environmental and human health risks from pests and pesticides, which we can measure with existing and new resources dedicated to IPM assessment **Possible Measures:** Crop Pest Losses Surveys (cotton, lettuce, melons, alfalfa) annually measure pest impacts, pesticide use by target pest, yield losses, costs of control and economic returns to growers; APMC Pesticide Use Database measures pesticide use, rates, locations, target pests, pounds active ingredient applied, and data are available from 1991 to present. These data are now augmented by ability to quantify eco-toxicological pesticide risks and their reduction through risk mitigation practices in collaboration with Oregon State University using Pesticide Risk Mitigation Engine (ipmPRiME).