

Arizona Pest Management Center – Logic Model for IPM Assessment Leadership Team*

*This team is a core resource that supports effective evaluation of adoption and impact of IPM across EIP emphasis areas

Situation	Inputs	Outputs		Outcomes- Impacts		
		Activities	Participation	Short Term	Medium Term	Long Term
<p>1) Few faculty engaged in IPM in a large state, spread across academic departments, counties and campuses – most with little experience in assessment</p> <p>2) IPM programs in agriculture and community IPM (including agronomic, specialty crops, schools and pesticide applicators)</p> <p>3) A need to document outcomes and impacts of IPM to ensure ongoing success in competitive funding and program improvement</p> <p>4) Need for improved capacity and resources to support effective IPM assessment and information needs related to IPM, pesticide use & pesticide safety</p>	<p>1) Stakeholder input on IPM assessment priorities thru IPM Assessment Leadership Team (LT), Pesticide Use Database Advisory Committee and other engagements</p> <p>2) Full-time IPM Program Manager with evaluation expertise and full time Assistant in Extension with database and IT expertise to support IPM assessment</p> <p>3) Input from IPM Leadership Teams on Assessment needs</p> <p>4) Funding from EIP, Western IPM Center and various competitive grants to support IPM assessment research and outreach</p> <p>5) AZ agricultural pesticide use reports from ADA integrated into APMC database; data from end users on Crop Pest Losses; other data resources</p> <p>6) Hardware, software and dedicated servers to support database, web and programming needs</p>	<p>1) We engage stakeholders to identify needs for IPM assessment (e.g., IPM-CC, IPM Assessment LT, Pesticide Use Database Advisory Comm.)</p> <p>2) We support coordination and Extension IPM planning, communication, transparency, resource development and educational outputs</p> <p>3) We develop data and resources to measure IPM adoption, outcomes and impacts: (a) maintain, expand and improve APMC Pesticide Use Database; (b) support Crop Pest Losses survey data collection and analysis; (c) database for tracking outputs; (d) ipmPRiME to measure IPM impact on pesticide risk via OSU collaborations</p> <p>4) Data verification and quality control is a central and significant activity</p> <p>5) Exercise data resources to respond to research, education, registration, and pesticide information needs and to develop data for grants, reports, impact statements, data queries, etc.</p> <p>6) Work with IPM LTs and provide input on appropriate measurement indicators and assessment methods</p> <p>7) Participate in research projects related to the measurement of IPM adoption, implementation and impact</p>	<p>Our activities support multi-disciplinary faculty state-wide; customers include faculty, administrators, regulators, growers, PCAs, IPM end users in all environments; We collaborate with Arizona Dept. of Ag, AZ Crop Protection Association, AZ Cotton Research & Protection Council and other state and national organizations; Western IPM Center and scientists & Extension colleagues regionally and nationally</p>	<p>Knowledge</p> <p>Improved data resources and capacity for IPM assessment and responding to IPM information needs; improved faculty engagement in IPM assessment; through our investments we increase our ability to measure changes in IPM knowledge and practice among end-users</p> <p>Possible Measures:</p> <p>Inventory of data resources for IPM assessment; number of and turn-around time on data requests; time invested in faculty engagement related to IPM assessment</p>	<p>Behavior</p> <p>New funding resources developed to expand IPM efforts; new partnerships and collaborations related to IPM measurement; 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; outputs related to our increased capacity will include presentations, publications, reports and grants as well as research outputs documenting impacts of IPM practice</p> <p>Possible Measures:</p> <p>We are developing a grant database that will help track changes in IPM funding over time as well collaborations; Improved program assessment by Extension faculty will be evident on project reports; outputs are tracked through our Outputs database</p>	<p>Long term</p> <p>Our increased capacity for IPM assessment will increase research and outreach funding and our ability to 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</p> <p>Possible Measures:</p> <p>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 (1991 to present) measures pesticide use, rates, locations, target pests, pounds active ingredient applied; these data are augmented by our 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).</p>