Sustainable Corn project team personnel, meetings and outputs: Facts and figures

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Introduction

❑ The Sustainable Corn (USDA-NIFA funded) team is a partnership across 11 institutions across 9 states and 19 disciplines working together as a transdisciplinary team to conduct research, extension and outreach, and education. The project began in March 2011 for 5 years (till Feb. 2016).

❑ The team collected biophysical and social economic data for research purposes while data pertaining to outcomes, deliverables, personnel, pre- and post- assessments, meetings attendance and duration was necessary for project management, reporting, and transparency to funders.

❑ In this exercise the time frame examined was starting March1, 2011 to July 1, 2015 to examine whether there is a relationship between a member's level of involvement in team meetings (virtually and in-person) to the deliverables they authored.

Databases and Methodology

❑ Project is maintaining two websites, google internal one for team members and external one for general public. Various databases were created and maintained on daily basis in smartsheet (www.smartsheet.com), a web base management tool.

❑ Team personnel database includes information of team members with their personnel and professional details for use by team members and also in tracking personnel employed and affiliated with the team over the life of the project. Each team member's details were filed as per the supervisor or lab group, general position and objective(s) he/she working on.

❑ The meeting attendance database each individual member is represented in the team's personnel database and is categorized per their supervisor or lab group, position and objective(s). The meeting database contains data pertaining to type of meeting (virtual, in-person), scope (Objective, whole team, leadership), date, team members in attendance; attendance is recorded as binary with 0-not attended, 1-attended, and NA-not applicable.

❑ The principal investigators submit Quarterly Progress Reports (QPR) using a CSCAP developed online form in smartsheet) in which they report all activities and outputs for that time period. The output database is manually populated primarily from data originating from QPR. The free-form text in the QPR goes through significant structuring and cleaning into citation quality outputs with it categorized in 1 of 23 differing outputs based on reported details and knowledge as it relates to academic efforts.

Instructions for team personnel, meetings and output numbers:

❑ For team personnel only dominant objective/role was counted per person.

❑ The number of meetings and team outputs in funding year 5 was counted till 07.01.2015

❑ Funding years were defined on project start and end date. Year 1: Mar. 2011 to Feb. 2012, Year 2: Mar. 2012 to Feb. 2013, Year 3: Mar. 2013 to Feb. 2014, Year 4: Mar. 2014 to Feb. 2015, Year 5: Mar. 2015 to Feb. 2016.

❑ Meetings types were based on team /group /subgroup personnel meet through virtual platform using adobe connect or in-person.

❑ Objective 4 has few meetings in collaboration with Useful 2 Usable (U2U).

❑ Outputs groups/categories were based on reported details and best fit in scientific literature.

Results

Table 1: Project at a glance

Project		Current	Past	Total
Intitutions Involved		11	1	11
Advisory Board Members		18	4	22
Admin/Operations		7	3	10
Principal Investigators	CSCAP	36	5	41
	USB	11	4	15
Graduate Students	CSCAP	40	38	78
	USB	4	3	7
Post-doctoral Associates		9	12	21
Staff		32	23	55
Extension Educators		18	6	24
Affiliates		7	0	7
Experimental sites		35	0	35

Sustainable Corn project team

- PIs — 29%
- Staff — 31%
- Graduate students and postdocs — 32%
- Affiliates — 4%
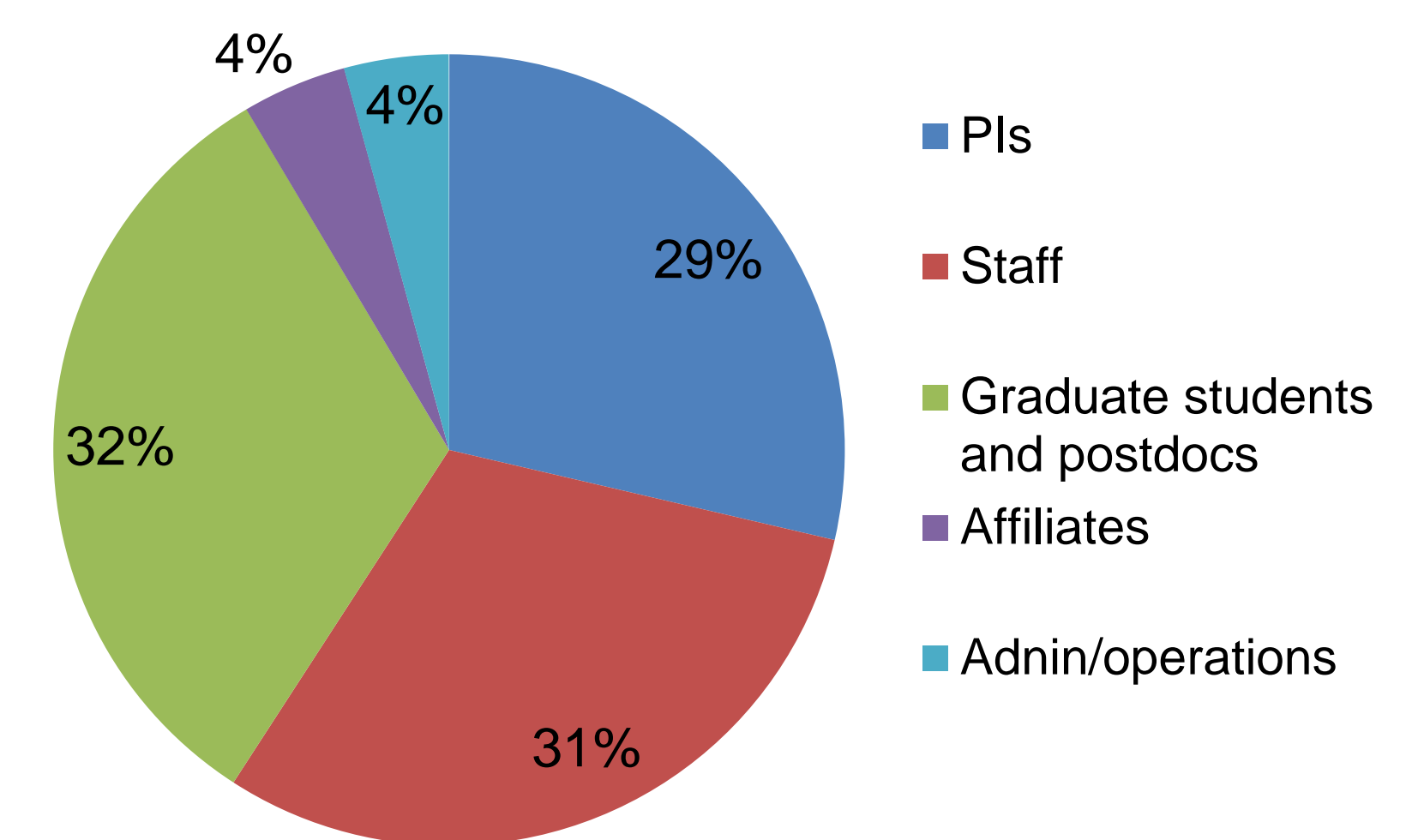- Adnin/operations — 4%

Figure 1: Number of meetings over funding years

❑ To–date, there have been 344 meetings: 35 leadership, 36 team, 64 field research group (Obj.1&2), 27 system modeling (Obj. 3), 66 socio-economic (Obj.4), 35 extension (Obj.5) and 49 education (Obj.6) group.

❑ Educational efforts were extended through webinar (n=21) by Obj. 6 team members.

❑ There were four in-person team annual meetings (n=4) and strategic convenings PIs (n=3) as well as Advisory Board meetings (n=4) with project leadership.
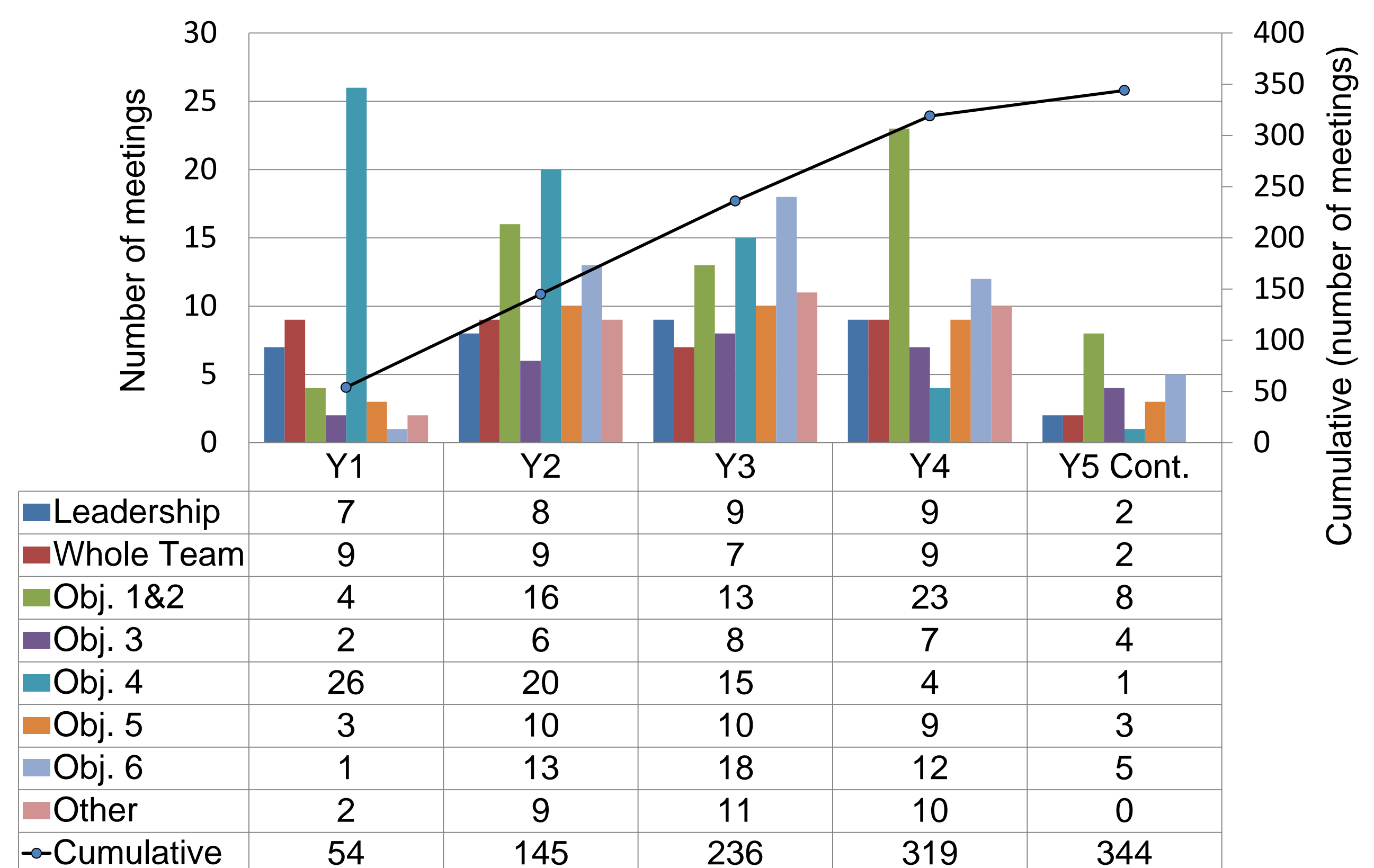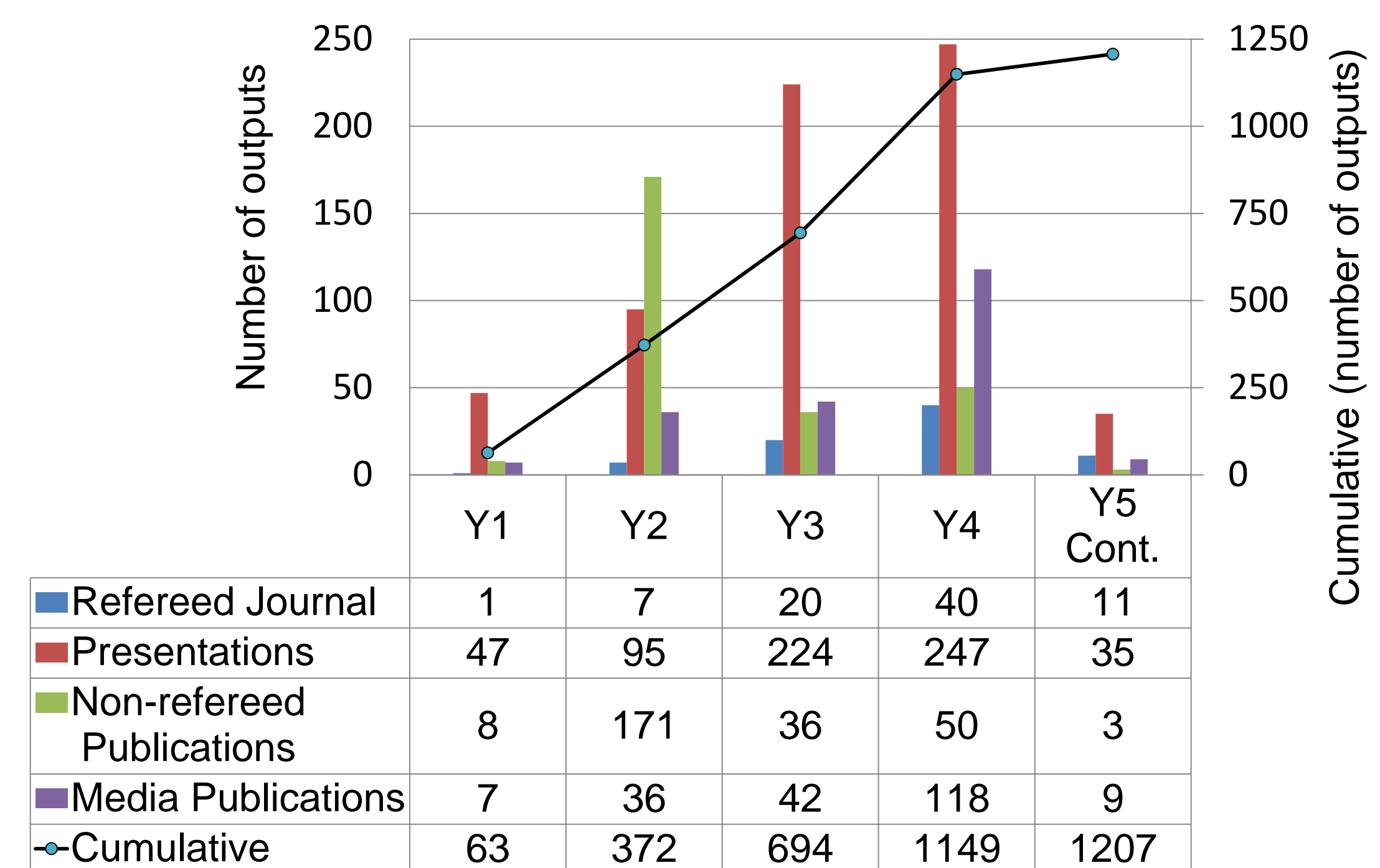

	Y1	Y2	Y3	Y4	Y5 Cont.
Leadership	7	8	9	9	2
Whole Team	9	9	7	9	2
Obj. 1&2	4	16	13	23	8
Obj. 3	2	6	8	7	4
Obj. 4	26	20	15	4	1
Obj. 5	3	10	10	9	3
Obj. 6	1	13	18	12	5
Other	2	9	11	10	0
Cumulative	54	145	236	319	344

Figure 2: Number of team outputs over funding years

❑ There is a substantial increase in total outputs occurred over time with 63 outputs in Y1 increasing to 309 in Y2; to 322 in Y3 and 455 in Y4. In funding year one project team was in process of establishment so there was not substantial contribution in outputs.

❑ The team has written 79 refereed journal articles to-date in addition to extensive outreach efforts in conference outlets and to extension audiences (n=648) to convey research findings to scientists and farmers.

	Y1	Y2	Y3	Y4	Y5 Cont.
Refereed Journal	1	7	20	40	11
Presentations	47	95	224	247	35
Non-refereed Publications	8	171	36	50	3
Media Publications	7	36	42	118	9
Cumulative	63	372	694	1149	1207

Conclusions

❑ Preliminary analysis showed interesting trends as it relates to activity level of the team and productivity (outputs).

❑ The number of meetings increased over time with later funding years having more meetings and is due to the need to meet goals and complete work.

❑ There is a substantial increase in total outputs observed over the funding years.

❑ Number of team co-authored papers that integrated disciplinary sciences and/or education and extension increased with time, with the greatest increases occurring in Y4 and Y5.

❑ Further analysis will examine the relationship of co-authorship dynamics and engagement on objective(s) calls as a measure of quality in addition to the overall quantitative metrics evaluated.