SURVEY ON BIORENEWABLES: FACULTY AND STAFF INTERESTS

College of Agriculture

Summary from the November 7, 2006 Meeting

Background

In conjunction with the university-wide dialogue on biorenewables, the College of Agriculture held its Briefing and Discussion on Biorenewables Resources town meeting in November 07, 2006. The purposes of the meeting were to (1) facilitate discussion on biorenewables; (2) encourage participation and determine interests in various areas of biorenewables, (3) plan for emerging opportunities in biorenewables research, extension, and education, and (4) make ISU as competitive as possible for these opportunities in biorenewables. The ultimate goal is to answer production, processing, socio-economic and environmental questions related to the emerging biofuels and bioproducts economy in the USA.

To facilitate achievement of the three purposes, a questionnaire was developed to solicit input and feedback (see attached survey instrument). The questionnaire utilized a "check-all-that-apply" structure. The questionnaire asked respondents to associate their interests with the categories in the questionnaire or add new categories that better reflected the respondents' areas of interests. The respondents were asked to provide information about their current (i.e., on-going) projects and identify areas of personal future interests.

The questionnaire was distributed at the college town meeting. The questionnaire also was sent to the college "all faculty" and "all staff" email listings on November 9, 2006 following the college town meeting. The deadline to respond to the questionnaire was December 17, 2006. This report summarizes the respondents' areas of interest and expertise.

Respondents' Profile

Eighty seven (87) completed questionnaires were returned as of December, 2006. The data were summarized by the respondents' departments/centers. In Table 1 the respondents are presented by department/unit in alphabetical order.

Table 1. Number of Faculty/Staff Interested in Biorenewable Resources by Department/Unit.

Department/Unit	Number of respondents
ABE	4
AGEDS	3
Agronomy	15
Animal Science	5
BBMB	1
Economics	7
EEOB	1
Entomology	3
Extension	1
FPM	1
FSHN	8
GDCB	2
Horticulture	1
ISBR	1
NREM	17
NSTL	1
Plant pathology	8
Sociology	4
Statistics	2
Value Added Ag Programs	1
VDPAM	1
Total	**87**

Key Survey Findings: Respondents' Areas of Interests

The questionnaire's categories for primary areas of interest were (1) research, (2) education, (3) extension, and (4) leadership (i.e., convening those with like interests). The respondents were asked to indicate their primary areas of interest. Table 2 summarizes the respondents' interest in each area. Respondents were also asked if they are willing to take a leadership role.

Table 2. Summary of Responses by Mission Areas: Education/Teaching, Extension and Research.

Education/Teaching	Extension	Research
Education only (3)[a]	Extension only (2)	Research only (44)
Education & Extension (1)	Extension & Leadership (1)	Research/Education (13)
		Research & Extension (7)
		Research & Leadership (5)
		Research & Education & Extension (4)
		Research& Leader & Education (1)
		Research & Education & Extension & Leadership (5)

[a](total number of faculty/staff who indicated that interest). One respondent did not indicate the area of primary interest. Total: 87 responses.

Among the 87 (N) respondents, 72 (n_1) are currently working on research that they classify as focused on (or related to) biorenewables. Another 15 (n_2) indicate that they do not have on-going research related to biorenewables but are interested. These 15 faculty/staff indicated that if additional resources were provided, they would pursue activities (research, extension and/or teaching) focused on biorenewables.

Table 3 shows a further breakdown for two broad areas of interest - production and processing and for subareas for each of these groupings (i.e., n_1 and n_2) of the respondents.

Table 3. Concentration of Respondents' (those who have, n_1 and do not have, n_2 current projects in biorenewables) Areas of Interest for Production and Processing Categories.

Area of Interests	Respondents (N=87)	
	$n_1 = 72$	$n_2 = 15$
I. Production:		
A. Crop production systems for biomass[(1)];	27	1
B. Economic analysis [(1)];	15	1
C. Germplasm development[(1)];	10	1
D. Co-products and livestock [(1)];	17	
E. Soil conservation, environmental impacts, nutrient cycling[(1)];	31	3
F. Harvest and storage [(1)];	9	
G. Educational materials and training[(1)];	11	3
H. Curriculum development;	4	2
I. Societal and community implications[(1)];	12	4
J. Other production areas (e.g., pathology, food and fuel impact, fish culture, agronomic production of plants, food safety, ecological risk).	5	
II. Processing:		
A. Biochemical (sugar) conversion of biorenewables to biofuels and bioproducts;	12	
B. Thermochemical conversion of biorenewables to biofuels and bioproducts;	3	
C. By-products for livestock;	16	1
D. Economic analysis[(1)];	12	1
E. Educational materials and training [(1)];	4	3
F. Curriculum development[(1)];	2	2
G. Societal and community implications[(1)];	9	4
H. Other processing areas (e.g. effluents, effects of grain molds on ethanol processing).	3	

[1]Several respondents indicated two or more areas of interest within each category (i.e., production and processing).
Several participants indicated interest in both production and processing areas.

The following common relational patterns of areas of interest within each category were evident from the information submitted by respondents:

I. Production:

- crop - harvest; crop – soil; crop – soil – food safety and ecological risk; crop – genomics; crop – economic – soil – education – societal; crop – germplasm – soil – education; crop – economic – co-products – soil – harvest – education – curriculum;
- co-products – harvest; co-products – soil; co-products – fish culture;
- education – societal; educational – curriculum;
- economic – societal; economic – co-products – societal; economic – education – societal;
- germplasm – crop – economic – societal;
- harvest – education;
- soil – societal;

II. Processing:

- biochemical – by-products; biochemical – thermochemical - by-products; biochemical – thermochemical – educational – curriculum; biochemical – economic – educational – societal;
- by-products – economic – societal; by-products – economic – educational;
- education – societal; educational – curriculum;
- economic – societal; economic – curriculum – societal.