

# WESTERN AGRICULTURAL EXPERIMENT STATION DIRECTORS

OFFICE OF THE DIRECTOR-AT-LARGE

MARK T. BUCHANAN  
Director-at-Large

October 12, 1973

SUBJECT: Items for attention/action of specific persons

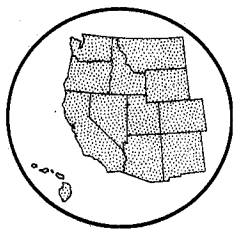
TO : Western Directors

Following is a list of items taken from the August 1973 Minutes of Western Directors. Your attention is called to these items for action and/or information.

All Directors	- p. 74, item 10.61
Executive Committee	- p. 45, item 30.0; p. 57, item (7)
Forward Planning Committee	- p. 55, items f and g
L. C. Ayres	- p. 74, item 10.5
D. W. Bohmont	- p. 56, item n.1
M. T. Buchanan	- p. 56, item n.2; p. 57, item (5)
M. J. Burris	- p. 74, item 10.5
D. D. Johnson	- p. 70, item 10.221; p. 73, item 10.42
J. P. Jordan	- p. 69-70, item 10.21
R. J. Miller	- p. 72, item 10.34; p. 74, item 10.5
R. E. Moreng	- p. 71, item 10.23
A. M. Mullins	- p. 74, item 10.5
A. F. McCalla	- p. 70, item 10.223
J. M. Nielson	- p. 73-74, item 10.43
D. L. Oldenstadt	- p. 70, item 10.222; p. 71, item 10.224
J. S. Robins	- p. 74, item 10.5
C. P. Wilson	- p. 69, item 10.14
G. B. Wood	- p. 4, item 7.0; p. 28, item 21.0; p. 55, item h; p. 57, item (3); p. 68, item 10.12; p. 71-72, item 10.32

Sincerely,

Nancy Raphael  
Recording Secretary



# WESTERN AGRICULTURAL EXPERIMENT STATION DIRECTORS

OFFICE OF THE DIRECTOR-AT-LARGE

MARK T. BUCHANAN  
Director-at-Large

October 12, 1973

TO : Western Directors

FROM : Nancy Raphael  
Recording Secretary *Nancy Raphael*

SUBJECT: Minutes of Summer 1973 Meeting

Attached are the Minutes of the Western Directors Meeting  
held in Newport, Oregon, August 13-17, 1973.

Attachment

WESTERN ASSOCIATION  
OF AGRICULTURAL EXPERIMENT STATION DIRECTORS

MINUTES OF SUMMER 1973 MEETING

Dunes Motel and  
Marine Science Center  
Newport, Oregon

August 13-17, 1973

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WESTERN ASSOCIATION  
OF AGRICULTURAL EXPERIMENT STATION DIRECTORS

MINUTES OF SUMMER 1973 MEETING

Dunes Motel and  
Marine Science Center  
Newport, Oregon

August 13-17, 1973

Present:	Arizona	- R. K. Frevert
		- G. R. Stairs
California	- J. B. Kendrick, Jr.	
	- W. M. Dugger, Jr.	
	- L. L. Sammet	
	- A. F. McCalla	
Colorado	- D. D. Johnson	
	- R. E. Moreng	
Hawaii	- C. P. Wilson, Vice Chairman	
	- L. D. Swindale	
Idaho	- R. J. Miller	
	- A. M. Mullins	
Montana	- J. A. Asleson, Treasurer	
	- M. J. Burris	
Nevada	- D. W. Bohmont	
	- R. E. Ely	
New Mexico	- P. J. Leyendecker	
	- M. L. Wilson	
Oregon	- G. B. Wood, Chairman	
	- W. H. Foote	
	- W. T. Cooney	
	- R. W. MacVicar	
	- R. W. Henderson	
	- D. P. Moore	
Utah	- D. W. Thorne	
	- C. E. Clark	
Washington	- J. S. Robins	
	- J. M. Nielson	
	- L. W. Rasmussen	
	- D. L. Oldenstadt	
Wyoming	- N. W. Hilston	
	- L. C. Ayres	
WDAL	- M. T. Buchanan, Secretary	
	- Nancy Raphael, Recording Secretary	
	- J. M. Roop	

Guam	- W. L. Thuemmel
CSRS	- R. L. Lovvorn
ARS	- H. R. Thomas
	- R. D. Plowman
	- T. J. Henneberry
	- E. L. Kendrick
	- A. I. Morgan
	- S. L. Jones
	- S. N. Brooks
	- W. D. McClellan
	- L. Hopkins
ERS	- L. E. Juers
FS	- E. M. Gaines
ARI	- A. R. Baldwin
EPA	- A. F. Bartsch
Corvallis Gazette- Times	- Don Bundy

## 1.0 Call to Order

Chairman G. B. Wood called the meeting to order at 9:00 a.m., August 15, 1973.

### 1.1 Opening Comments - R. W. MacVicar

President MacVicar of Oregon State University welcomed the group to Newport. He then discussed the impact of the agricultural sector on the national and international economic spheres. Emphasizing the value and necessity of continuing agricultural research for non-corporate operators, President MacVicar stressed the continuing challenge to the agricultural research community in meeting this need. In order to accomplish this and other objectives, a more aggressive program designed to provide fuller public knowledge of the workings and importance of agricultural research and extension should be instituted.

## 2.0 Adoption of Agenda

The agenda was adopted with a few additions.

### 3.0 Introductions

Director G. B. Wood introduced the following people:

Wilbur T. Cooney, Dean, School of Agriculture  
Oregon State University

Robert W. MacVicar, President, Oregon State  
University

Don Bundy, Reporter, Corvallis Gazette-Times

William L. Thuemmel, Acting Director of the Guam  
Agricultural Experiment Station

Edward M. Gaines, Assistant Director, Pacific  
Southwest Forest and Range  
Experiment Station

A. Richard Baldwin, Chairman of the Agricultural  
Research Institute

Director R. K. Frevert introduced Gerald R. Stairs as  
Dean of the Arizona College of Agriculture. Dr. Stairs  
replaced Dr. H. R. Myers who retired recently.

Dean A. M. Mullins introduced Ray J. Miller as  
Director of the Idaho Agricultural Experiment Station.

Director M. T. Buchanan introduced Joseph M. Roop  
who has been added to the DAL staff as Research  
Planning Associate.

Director J. B. Kendrick, Jr. introduced Loy L. Sammet  
as Acting Dean of the College of Agricultural Sciences  
and Acting Associate Director of the California Agri-  
cultural Experiment Station effective September 1, 1973.

Chairman Wood recognized John S. Robins as Dean of the  
College of Agriculture, Washington State University;  
and James B. Kendrick, Jr. as Director of the California  
Agricultural Experiment Station.

### 4.0 Announcements

The local arrangements were announced by Drs. R. W.  
Henderson and G. B. Wood.

## 5.0 Approval of March 1973 Minutes

The Minutes of the Western Directors' Spring 1973 Meeting were approved as distributed.

## 6.0 Report of Chairman/Report of Executive Committee - Wood

Chairman Wood announced that he had appointed the Nominations Committee as follows:

J. B. Kendrick, Jr., Chairman  
N. W. Hilston  
L. D. Swindale

The Resolutions Committee was appointed with W. M. Dugger, Jr., as Chairman and C. E. Clark and R. E. Ely as members.

Due to the reassignment of B. E. Day, interim appointments were made:

WRPC Cochairman - C. P. Wilson  
RRC Chairman - W. H. Foote  
Secretary - M. T. Buchanan  
National Cotton Committee - D. F. McAlister

6.1 A joint meeting of the Executive Committee and the Forward Planning Committee was held on August 14, 1973. Minutes of this meeting are appended as Appendix 6.1.

## 7.0 CSRS Report - Lovvorn

Administrator Lovvorn reported that Assistant Secretary Robert Long's Deputy is Dr. Paul Vandermyde. He suggested that the Western Directors consider inviting Dr. Vandermyde to one of their meetings.

### 7.1 Fiscal Year 1974 Budget

Although the FY 1974 funds are not yet in an appropriation bill, they have passed both houses and are near the FY 1973 funding levels. Apparently, the significant difference will be in the P.L. 89-106 funds.



The internal budget of CSRS will now permit recruitment of a limited number of temporary personnel. Former Director Clarence F. Kelly of California and Assistant Director D. F. McAlister of Arizona have made significant contributions to CSRS in the past year.

## 7.2 Publications

Plans are underway to phase out "Agricultural Science Review", a quarterly journal which CSRS has published since 1963. A new publication, tentatively entitled "Agricultural Research Digest" will be a monthly periodical of approximately four to eight pages. This periodical will highlight and summarize significant State-Federal research findings. The publication will be aimed primarily at the popular press, and will serve as a tip sheet for science writers on upcoming news and possible breakthroughs.

CSRS will continue to edit and publish the "Agricultural Handbook 305" which has been published annually since 1880, and the weekly "Experiment Station Newsletter".

## 7.3 1975 "Yearbook of Agriculture"

The "Yearbook of Agriculture" will be a documentary emphasizing the scientific achievements of the state agricultural experiment stations for the first century. This is to be a part of the centennial celebration of the state experiment stations.

## 7.4 Rural Development Act of 1972

The guidelines for rural development have been cleared with the Office of General Counsel, published in the Federal Register, and submitted to the Office of Management and Budget. These guidelines provide for the 10 per cent for regional activities of the four Rural Development Centers for research and extension.

## 7.5 Bilateral Agreements Between U.S. and U.S.S.R.

The agreement on cooperation in the field of agriculture was signed in June, 1973. It provides for a joint U.S. - U.S.S.R. committee on agricultural cooperation and two joint working

groups, one on agricultural research and technological development and one on economic matters. Tentatively, on the U.S. side, the joint committee membership will consist of:

(One of the Assistant Secretaries), Chairman  
 Robert W. Long, Vice Chairman  
 Administrator, ERS  
 Administrator, ARS  
 Administrator, CSRS  
 Administrator, Foreign Agriculture  
 Two or three people from industry.

#### 7.6 Visit by Department of Agriculture Administrators

Secretary Butz and the Assistant Secretaries of Agriculture will be visiting in the west during the last week of August.

#### 7.7 EPA

Dr. Robins reported that CSRS has taken action on behalf of SAES to have drafts of guidelines, procedures and regulations provided to SAES administrators who wish to have copies prior to their publication in the Federal Register.

### 8.0 DAL Report - Buchanan

#### 8.1 Congressional and Legislative Actions

You have received the reports from CSRS concerning House and Senate Committee and House and Senate actions on appropriations for Hatch, McIntire-Stennis and other funds administered within CSRS.

This is the successful, or near successful (we did not get the item for increased cost of doing research) culmination of numerous activities, some of which I spoke to in some depth at the spring meeting. May I express again to you on my own behalf and on behalf of the Legislative Subcommittee on ESCOP and the whole community appreciation for your activities in these matters. Thank you, too, for sending me copies of correspondence and otherwise keeping me informed of your activities. Reports are that there were more contacts made with Congressmen and with Department

of Agriculture officials this year concerning particularly Hatch funds than people can remember having been made previously. In this connection it certainly is appropriate for you to express your appreciation now to the Members of Congress and others with whom you have had contact. I have had copies of letters from some of you indicating that this has been done.

## 8.2 Meeting with Bob Long, June 28, 1973

This was a follow-up meeting of an earlier one requested by Bob Hampton of the National Council of Farmer Cooperatives and representatives from other agribusiness and other agricultural industry firms who had met at the request of Dean L. R. Kolmer of Iowa State University in Kansas City. The principals of these firms, in turn, asked the National Council of Farmer Cooperatives to take the lead in arranging for a session with a very high official within the OMB in order to make a special case for the restitution of Hatch Funds. Contact was made with Long to make arrangements for the meeting. At the first meeting with Bob Long, attended by Bob Hampton and Jim Beattie, Long requested that he be furnished with a one page statement concerning State Agricultural Experiment Stations' operations and the particular place within this of Hatch funding. Hampton attended the Georgetown meeting of ESCOP at Whatley's invitation and subsequent to discussion there, Whatley asked a number of persons to prepare and send to Bob Hampton the kind of one page statement they would visualize for the intended purpose. Hampton agreed to put these together into a statement that would be presented to Long at the next meeting and which in turn might be the basis for the meeting to be arranged with OMB. Hampton asked the Regional Directors to prepare the statement for discussion with Long on the basis of the responses received. This was done. However, prior to the June 28 meeting with Long, both the House and Senate Subcommittees on Appropriations had taken action to restore most of the Hatch cut. Thus, a somewhat different statement was indicated. A copy of the statement finally prepared and used in the discussion with Long on June 28 has been distributed with OWDAL-88. Long's reaction to the statement was that it was a good philosophical treatise but still too lengthy and too much in

narrative form for use with OMB. He stated that the Department is working on visuals and that a much shorter text would be desirable. Long agreed to make every effort to get a meeting lined up directly with Roy Ashe at which ARS, CSRS, Deans and Directors, representatives of the National Council of Farmer Cooperatives and representatives from other agribusiness and other agricultural industry firms would be included. Present at the June 28 meeting with Bob Long were Bob Hampton, Lee Kolmer, George Browning, Jim Beattie, Jack Robins and myself. Hampton is going to continue to ride herd on this.

The Statement prepared for the meeting with Long has two significant points. One is that the agricultural research system of the United States comprised of industry, USDA and SAES is an important resource. We should work toward strengthening the whole system in the interest of consumer and public welfare. The second point is that Hatch Funds, particularly, play a very important role as the "glue" that holds the system together.

We also had, at the meeting, the language available from the Senate Committee Report on Agricultural Appropriations in which, in the boiler-plate, ARS was identified as the research arm of the federal government, and authorized and equipped to do about everything, everywhere. Under the CSRS heading, a statement was made to the effect that this is the means by which the federal government makes its "contributions" to the Land Grant Experiment Stations. We pointed out to Mr. Long that such language tends to perpetuate the competitiveness among the component parts of the research system more than it does to demonstrate how we work together.

Subsequent to the meeting with Mr. Long, Dr. J. B. Kendrick, Jr., in his capacity as Chairman of the Division of Agriculture sent a letter to Mr. Long that further emphasized the importance of presenting matters for the system as a whole. Jim also underscored the desirability of some announcement by Long, himself, or the Secretary, of the goals within the Department of Agriculture for planning and otherwise for cooperative and joint action in order to advance and foster the idea of a cooperative research system. Long had reported in the meeting of June 28 that he plans to hold a

meeting with Administrative Heads of Agriculture this fall, at which time he would have some proposals to make. Kendrick suggested that a generalized statement might be made right away concerning the Department's desires with respect to the planning process, for example, which would still leave open to him a number of options with respect to particulars for discussion at the fall meeting. This suggestion was made in the interest of maintaining the momentum that has been attained in the regional and national planning process and in other matters associated with joint and cooperative activities among the Land Grant community and the USDA.

### 8.3 Actions in State Legislatures

Knowing that each of you would be vitally interested in reports of actions of State Legislatures within the western region, I attempted to expedite discussion on this matter by sending around a questionnaire and summarizing your responses. Responses were received, finally from all states. A summary table of these responses follows:

#### PARTIAL SUMMARY OF RESPONSES TO BUCHANAN MEMO OF JUNE 7, 1973 REGARDING LEGISLATIVE ACTIONS

STATE	APPROPRIATION OR ALLOCATION		SALARY INCREASE INCLUDED		AVERAGE SALARY INCREASE			PER CENT PERSONNEL SERVICES	
	FY 1973	FY 1974	YES	NO	ACA- DEMIC	PROFESSION- AL STAFF	OTHER	TOTAL	
	\$ MILLIONS				%	%	%	1973	1974
AZ									
CA	24.775	24.875		X	-*	-*	-*	68	68
CO	4.200	4.600	X		6.0	7.5	7.5	67	73
HI	3.591	3.045		X	4.0	10.0	16.0	80	90
ID	1.740	1.856	X		6.0	6.0	5.0	69	72
MT	1.950	2.130	X		5.0	5.0	5.0	73	72
NV	.911	1.049	X		5.0	5.0	5.0	75	76
NM	1.400	1.550	X		5.0	5.0	5.0	100	100
OR	4.214	4.839	X		5.0	-	5.5	82	82
UT	1.387	1.521	X		6.0	7.0	7.0	54	51
WA	5.086	5.592	X		12.0	6.0	4.0	79	81
WY	1.046	1.080	X		4.0	4.0	4.0	-	-

\*Pending Cost of Living Council Action.

#### 8.4 NISARC

The next meeting of NISARC is scheduled for October 8-9, 1973 at the Burlington Hotel in Washington, D.C. Bill Hollis, the current Chairman of NISARC called a group together in June to discuss program plans for that session. The industry people present emphasized that while they wanted a brief report on budget matters, especially the outcome of the Hatch Funds and activities associated with their restoration, they would not want to discuss such items over-long. They would prefer instead to have industry members speak to their most significant research concerns, to give the Land Grant representatives an opportunity to do likewise and to provide an opportunity for discussion in the meeting of these matters. It became apparent soon that the industry representatives present were concerned primarily with two matters: (1) The impact of the actions of regulatory bodies such as OSHA (Occupational, Safety and Health Act of the Department of Labor), EPA, and the like, and the manner in which these regulations are, can be or should be influenced by research findings, either existing knowledge or knowledge to be attained. Ed Crosby was asked to develop a panel along these lines. (2) The decision-making process of the research community by which priorities and resource allocations are made. I was asked with John Airy to organize a panel on this topic. It was agreed to integrate the two so that the discussion of resource allocation might be directed primarily at the burning issues facing the industry people in the regulatory arena.

#### 8.5 "Farm Summit"

The "Farm Summit" meeting called in Washington, June 18 by freshman Congressman Jerry Litton of Missouri was reported to be attended by more than 400 people including 40 members of Congress and by representatives of more than 200 farm groups. An ad hoc committee of 75 leaders of American agriculture and a steering committee of 23 members have been named to follow-up on the two motions that were passed unanimously at the June 18 meeting: (1) That an ad hoc committee be appointed by Litton to work out ways of accomplishing the objectives outlined at the meeting; and (2) That the group go on record as favoring the development

of some structure whereby all of American agriculture could unite behind one effort to work toward closing the communications gap between the consumer and producer. The purpose of the June 18 meeting as explained by Litton was "to discuss the growing crisis resulting from an expanding communications gap between consumer and producer which is hurting both groups as well as the economy of our nation".

#### 8.6 Communications Workshop, Communications Research and other efforts in the area of communications that relate to the Centennial of State Agricultural Experiment Stations

The President of AACE (American Association of College Editors), Jim Johnson of Washington State University, attended as the western representative the Communications Workshop held in Atlanta. He says it was a good meeting. A committee is developing specific proposals to "follow-up".

#### 8.7 Regional and National Planning

As you know, an ad hoc subcommittee of ARPAC has recommended a larger and "more representative" committee to replace ARPAC. The science and Education Staff of USDA has dispersed and the Office of Science and Education remains only as one of the current titles of Mr. Long who, with respect to that activity, still carries the title Acting Director, Science and Education. As stated in the original documentation presented to ARPAC concerning regional and national planning, probably the most important ingredient relating to the success of the venture is commitment. We need a "reaffirmation of faith" and steps are being taken to achieve it.

A very significant meeting, in my opinion, was held this spring in Denver of Co-chairmen of Regional Planning Committees. Mr. Long was present. There was a great deal of evidence of progress on regional and national planning within the four regions. Mr. Long was enthusiastic in his comments about what had been done and the uses that might be made of the materials evolving from this activity. He stated that he would see to it that the USDA agencies participated fully in the process. However, word of this commitment and further interpretation of its meaning and

significance are not widely dispersed within the research community.

Within the western region, we are looking forward to continued full speed ahead in the Regional Planning Committee, RPG's and RP's as C. P. Wilson of Hawaii takes over from Boysie E. Day of California as Co-chairman with Harry Camp of the Forest Service of the Regional Planning Committee. Peairs and Harry met with Joe Roop, Ed Gaines and me on August 10 to discuss the next steps to be taken in conjunction with Western Regional Planning Committee and related activities. The membership of RPG's has now been finalized and a meeting is planned on September 19 with the RPG Co-chairmen. Joe Roop is on the job in the role of Research Planning Associate. I should like to allow him an opportunity, now, to introduce himself again to the group and to make further remarks concerning the planning process in the western region.

#### 8.8 Budgets

Statements of expenditures for the DAL Office and the recording secretary function for fiscal year 1973 are appended.



## STATEMENT OF EXPENDITURES

OFFICE OF THE WESTERN DIRECTOR-AT-LARGE

JULY 1, 1972 - JUNE 30, 1973

	<u>APPROPRIATION</u>	<u>EXPENDITURE</u>	<u>BALANCE</u>
General Assistance	\$42,885.82	\$42,885.82	\$ -0-
Supplies & Expense	13,241.26	13,665.89**	-424.63
Equipment & Facilities	173.02	173.02	-0-
Employee Benefits	4,334.79	4,334.79	-0-
 Total	 <u>\$60,634.89*</u>	 <u>\$61,059.52</u>	 <u>-\$424.63</u>

*Received from Montana	\$54,200.00
Carried Forward from	
FY 1971-72	<u>6,434.89</u>
	<u>\$60,634.89</u>

## \*\*Itemization of Expenditure:

Travel	\$ 8,565.62
Central Duplicating	686.51
Mailing Division	453.09
Telephone	1,130.08
Direct Charge, Misc., K#	2,352.44
Library	41.85
Storehouse	183.58
Printing Department	160.60
Garage	91.92
	<u>\$13,665.89</u>

## STATEMENT OF EXPENDITURES

OFFICE OF THE WESTERN DIRECTOR-AT-LARGE

RECORDING SECRETARY FUNCTION

JULY 1, 1972 - JUNE 30, 1973

	<u>APPROPRIATION</u>	<u>EXPENDITURE</u>	<u>BALANCE</u>
General Assistance	\$ 6,936.41	\$ 6,936.41	-0-
Operating Expense			
& Equipment	2,704.60	2,704.60*	-0-
Employee Benefits	858.99	858.99	-0-
Total	<u>\$10,500.00</u>	<u>\$10,500.00</u>	<u>-0-</u>

## \*Itemization of Expenditure:

Travel	\$1,366.37
Mailing Division	437.26
Central Duplicating	414.50
Storehouse	48.92
Direct Charge, Misc., K#	437.55
	<u>\$2,704.60</u>

## 9.0 FPC Report - C. P. Wilson

Director Wilson reported that the Forward Planning Committee met jointly with the Executive Committee. The FPC Report will be covered by the Executive Committee Report, Appendix 6.1 of these minutes.

## 10.0 RRC Report - Foote

The Regional Research Committee considered the following items: (See Appendix 10.0 for details.)

### 10.1 Project Reviews

- 10.11 W-109 Codling Moth Population Management in the Orchard Ecosystem
- 10.12 W-115 Western Region Area Development Research Center
- 10.13 W-120 Economic and Social Impact of Adjustment in Use of Chemicals in Agriculture
- 10.14 WM-62 Technological and Structural Changes in the Marketing of Beef
- 10.15 IR-1 Introduction, Preservation, Classification, Distribution, and Preliminary Evaluation of Wild and Cultivated Species of Solanum
- 10.16 WRCC-12

### 10.2 Project Proposals

- 10.21 Assessment of Social Competence in Children of Selected Rural Populations in the Western Region
- 10.22 Marketing Research
  - 10.221 Impacts of International Trade on Western Agriculture
  - 10.222 Price Determination and Reporting in Forward-Contracted Commodities

- 10.223 The Effects of Adjustments in Energy Use on Production and Marketing in Agriculture
- 10.224 Economic Analysis of Collective Bargaining for Agricultural Products
- 10.23 Turkey Breeding Research
- 10.3 Revisions and Extensions
  - 10.31 W-6 Introduction, Multiplication, Maintenance and Evaluation of Plant Germ Plasm
  - 10.32 W-113 Improvement of Employment Opportunities and Earnings for Disadvantaged People in Non-Metropolitan Areas
  - 10.33 W-114 Institutional Structures for Improving Rural Community Services
  - 10.34 W-108 Response of Plants and Plant Communities to Sustained Use of Herbicides
  - 10.35 W-121 Clean West: A Systematic Analysis of the Economic and Social Implications of Environmental Problems
  - 10.36 WRCC-8 Range Livestock Nutrition
- 10.4 WRCC Petitions
  - 10.41 Determinants of Choice in Outdoor Recreation
  - 10.42 Control of Fruiting
  - 10.43 Northwest Alfalfa Pollination
- 10.5 Personnel Reassignments
- 10.6 Other
  - 10.61 Format for Review of Projects
  - 10.62 Means by which to obtain information regarding inputs from all sources with respect to projects requesting off-the-top funding

10.63 Financing Regional Research Publications

10.64 Off-The-Top Funding for W-6

10.65 An Economic Analysis of Present and Potential Trade Between Alaska and Washington

10.7 Support of Regional Research Projects

11.0 ESCOP Report - Bohmont

ESCOP met in April 1973 at the Hobcaw Barony, Georgetown, South Carolina. Minutes of the meeting have been sent to each of the Directors.

Director Bohmont referred to the appendix of the minutes regarding the Memorandum of Understanding between the U.S. Department of Agriculture and the National Association of State Universities and Land-Grant Colleges. This statement contains a number of penciled-in corrections or suggested changes. If anyone has comments, please send them to Dr. G. B. Wood so that he can report them to ESCOP.

There was discussion regarding the ESCOP Vice Chairman position which still has not yet been resolved.

12.0 ESCOP Legislative Subcommittee - Bohmont

With respect to legislative matters, Dr. Bohmont reminded the Directors of a letter from Dr. Roy Kottman, Chairman of the ESCOP Legislative Subcommittee requesting certain things to be done regarding direct actions in achieving breakthroughs in federal funds. Director Bohmont asked the Directors to consider Dr. Kottman's suggestions and do whatever seems appropriate.

Director Kendrick stated that the Executive Committee of the Division of Agriculture, NASULGC, will be meeting in October to review the protocol for budget setting and budget requests.

13.0 ARPAC Report - Buchanan

ARPAC has not met since the spring meeting of Western Directors.

There are considerations with respect to modification

of ARPAC that have been before ARPAC and ESCOP. The outcome is still undetermined.

#### 14.0 Committee of Nine Report - Ayres

The Committee of Nine met April 25-26, 1973 in Washington, D.C. and June 26-27, 1973 in Jackson, Wyoming.

##### 14.1 1973 RRF Allotment Schedule Revision and Approval

At the April meeting, the Committee of Nine approved the revised RRF allotment schedule for 1973. All SAES Directors had responded to the request for revised RRF recommendations.

##### 14.2 Western Region Projects Approved

At both meetings, the significant discussion centered upon the FY 1974 RRF Allotment Schedule. The Committee of Nine noted that the current fiscal 1974 budget (President's) outlook and project closings on June 30, 1973 would leave a net deficit of nearly 20 SMY equivalents for project support, not allowing for new starts.

At the April meeting, a number of western research project proposals were recommended for approval and activation on July 1, 1973. The following list summarizes these actions, as revised after reviewing the Western Experiment Station Directors' FY 1974 RRF allotments at the June meeting.

##### 14.21 Approval for Funding

###### REVISED

- W-45      Residues of Selected Pesticides - Their Nature, Distribution, and Persistence in Plants, Animals, and the Physical Environment. 5 years, through June 30, 1978.
- W-106     Regional Research Planning and Coordination, Western Region. Indefinite duration.

###### NEW

- W-128     Trickle Irrigation to Improve Crop Production and Water Management. 5 years through June 30, 1978.

14.22 Approval, but activation is deferred pending recommendations for RRF allotments and other support

W- Development of Integrated Strategies for Management of Mosquito Population

W- Salinity Management in the Colorado River Basin

W- Improving Stability and Efficiency of Deciduous Fruit Production

W- Genotype-Environment Interactions Related to End-Product Uses in Small Grains

14.23 Returned to Administrative Advisor

W- Poultry Production and Environmental Quality (requiring a reworking and assurance that engineering competence will be included). A reworked project proposal was received by the Committee of Nine after the June meeting.

W- An Economic Analysis of Present and Potential Trade between Alaska and Washington. H. F. Drury (Alaska) Administrative Advisor. (Need for additional information and question use of W- number)

14.24 Dropped for lack of interest

W- Determinants of Choice in Outdoor Recreation

14.3 Western Regional Project Termination Reports Received

W-35 Facilitating the marketing of seed through improved assessment of seed quality factors. W. H. Foote (OR), Administrative Advisor.

W-59 An economic study of the demand for outdoor recreation. L. C. Ayres (WY), Administrative Advisor.

W-97 Assessing big game management alternatives through bioeconomic models. M. L. Wilson, (NM), Administrative Advisor.

W-100 Causes and control of reproductive failures of unknown etiology in livestock. Rue Jensen (CO), Administrative Advisor.

#### 14.4 Protection of Human Subjects

The Committee of Nine reviewed with CSRS the status of HEW and USDA regulations on human subjects in research and CSRS plans to obtain conformance. The Committee deferred action.

A list of Western regional research projects which might have contributing research subject to the regulations includes:

##### 14.41 As Test Subjects or on Taste Panels

W-116 Nutrition and food acceptance as related to selected environmental factors

##### 14.42 As Interviewees or Respondents

W-113 Improvement of employment opportunities and earnings for disadvantaged people in non-metropolitan areas

W-118 Economic and social significance of human migration for the western region

#### 14.5 Marketing Research

Attention should be given to the 20 per cent requirement for marketing research. Estimated RRF allotments for FY's 1973 and 1974 indicate 18.25 and 18.76 per cent marketing research, respectively.

#### 14.6 Support for Current Research Information System (CRIS)

At the April meeting, the Committee of Nine was asked to consider an interregional type of off-the-top funding of about \$75,000 to take care of most of the output requirements, assuming that input is a USDA responsibility. This item was again discussed at the June meeting. Several



alternatives, including an off-the-top allocation of the RRF vs. a line item in the CSRS budget, were considered. Further information from CSRS on the use pattern of CRIS has been requested for the fall meeting.

#### 14.7 IR Projects

At the April meeting, the Committee recommended that the IR project allocations be held at fiscal year 1973 levels (IR-1, \$50,500; IR-2, 60,000; IR-4, 83,024).

At the June meeting, the Committee reviewed a request for reconsideration of the FY 1974 allotment to IR-4, and after extensive discussion of the need for expanding the base of this research, recommended that the RRF allocation to IR-4 in FY 1974 be \$90,000, contingent on Congressional action increasing the RRF above that in the President's budget.

The Committee has requested the IR-4 administrative advisors to develop a proposal for a national program on evaluation of chemical data and needed research associated therewith.

#### 14.8 Justification for Committee of Nine Continuing

The Secretary of Agriculture's Memorandum No. 1783, revised, on the Committee of Nine, was discussed at the April meeting. This Memorandum requested that the Committee be reviewed, as required by the Federal Advisory Committee Act. The pros and cons were discussed. There was general agreement that CSRS recommend continuation of the Committee of Nine.

#### 15.0 WAERC Report - C. P. Wilson

WAERC met in San Francisco, California, on January 25-26, 1973, and on June 27-28, 1973.

##### 15.1 In response to a request by the Forward Planning Committee regarding the role of advisory committees, WAERC prepared a report, "Role of WAERC in Regional and National Planning and Implementation", which was handed out at the Spring 1973 meeting.

15.2 At the June meeting WAERC discussed "basic issues" faced by department heads:

- (1) Future organization of Land-Grant Universities and the future role of agricultural economics departments;
- (2) Program planning, program balance and departmental resource allocation;
- (3) Coping with budgetary restraints and/or declining budgets;
- (4) Staff obsolescence, staff evaluation and maintaining staff productivity;
- (5) Integrating extension personnel into the department;
- (6) Future needs for agricultural economics graduates.

15.3 At the request of Western Directors, WAERC submitted four marketing research proposals to RRC for consideration for the development of regional marketing projects. (These are included in the RRC Report.)

15.4 The report from the Center for Agricultural and Rural Development, Iowa State University, on "Agricultural and Water Policies and the Environment", was reviewed by the Natural Resources Committee of WAERC with special reference to irrigation needs in the west. (See item 24.0 for the report on this item.)

## 16.0 WSWRC Report - Frevert

The 1973 meeting of the WSWRC was held in Fort Collins, Colorado, on April 18, 19 and 20.

Special attention was given to the contribution of soil and water related research to the emerging research program in rural development. An example would be the use of soil survey information in land use planning activities which are going on at an intensified rate in the western states. The WSWRC felt strongly that additional attention should be given to this activity, not only in connection with research but also in extension and teaching programs. The following

resolution was passed:

"The WSWRC recommends to the Directors of the Western States that attention be focused on the opportunity and need to provide soil survey and related information on natural resources which are essential components for sound land-use decisions. Specifically the WSWRC recommends that the Directors:

- (1) Give higher priority to providing additional support to the area of soil survey interpretations and socio-economic criteria for land-use planning.
- (2) Recognize the relationships of the phase of land-use planning to rural development and the opportunity to allocate funds from rural development programs in research and extension to soil survey interpretations and other areas related to the development of sound concepts of land use.
- (3) Call this recommendation to the attention of Directors of Extension and Resident Instruction."

The WSWRC also recommends that the Directors approve a meeting of the (1) Phosphorus Work Group to be held in January, 1974 in Tucson, Arizona, and (2) Soil Survey Work Group to be held in January, 1974 in San Diego.

Director R. K. Frevert moved, seconded by Director M. J. Burris, that Western Directors authorize the meetings of the Phosphorus Work Group and the Soil Survey Work Group, providing that a Director be present as an advisor.

MOTION CARRIED.

The WSWRC also gave considerable attention to a revision of a Statement of Purpose, Organization, and Operational Procedures for the WSWRC, a copy of which has been distributed to each state.

The Statement of Purpose recommends that all appropriate water agencies be represented on WSWRC. Agencies other than the Agricultural Experiment Stations represented at the meeting included the Agricultural Research Service, the United States Forest Service, the Soil Conservation Service, the Environmental Protection Agency, and the Bureau of Reclamation.

## 17.0 WHERAC Report - Leyendecker

WHERAC met March 13-15, 1973, in San Francisco, California. The status of each of the following projects was reviewed with the following comments:

W-57 Termination noted June 30, 1973. It was also noted that Director J. P. Jordan had been appointed as Administrative Advisor to develop a regional research project in the area of human nutrition. Members of WHERAC were urged to assist their respective Station Directors in choosing representatives to the new Regional Technical Committee.

W-116 Good regional participation; moving ahead on schedule. Noted that it took considerable time to develop uniform regional procedures for the gathering of nutritional data.

WRCC-9 Making satisfactory progress. A proposal for a regional research project in the area of child development was forwarded to RRC. (See RRC Report for action on this item.)

Considerable difficulty has been encountered in the administration of the new Regional Interstate Doctoral Program. As a result, a meeting of member institutions is being called during the summer of 1973 to make revisions. Graduates from this program will help to alleviate the serious shortage of research personnel in home economics in the Western Region.

A special task force was appointed to prepare a position paper on home economics contributions to rural development and family living including action programs. Another committee was appointed to update the functions of WHERAC to include contributions to RPC and the part WHERAC is capable of playing in the regional planning effort.

Results of the Home Economics Research Inventory Questionnaire in the West show that: graduate enrollment varies from 14 to 49; undergraduate enrollment varies from 543 to 1609; FTE for teaching vary from 6 to 57; SMY's for research vary from 4 to 21; regional projects have decreased sharply; there are few regional research projects other than those in nutrition; teaching has first priority and much research must be "bootlegged" for time and funds, resulting in poor publication records, especially from regional research. Problem areas are: getting extension to provide needed areas of research; getting research personnel to back up

extension staff; utilizing research results from other states; utilizing extension personnel in the testing process in the Western States.

A state-by-state annual review of progress made in home economics in the West was very encouraging from the standpoint of new innovative programs, staff re-alignment, and improvement of research cooperation with subject-matter areas. It was also noted that considerable outside funding for home economics research comes from NIH, Public Health Service, and other Federal and state agencies.

WHERAC recommends to the Western Directors that because of the limited number and lack of regional research projects that they encourage qualified research personnel in family economics to become affiliated with ongoing regional projects in the other three regions.

WHERAC was asked for, and did respond with eight recommendations relating to the revision of "Focus", a home economics plan of action prepared by the Cooperative Extension Service.

Director P. J. Leyendecker moved, seconded by Director C. P. Wilson, that Western Directors accept the report of WHERAC and recognize the priorities identified in "Home Economics Research Priorities in the Western Region as Identified by WHERAC" as a reference document that reflects the priorities of this Advisory Committee.

MOTION CARRIED.

Director P. J. Leyendecker moved, seconded by Director J. B. Kendrick, Jr., that Western Directors refer items 1 and 4, as revised, in the document, "Memorandum, Home Economics Research Contributions to Rural Development and Family Living Determined by WHERAC", to the Administrative Advisor of the Rural Development Center (W-115) for consideration. The items are as follows:

WHERAC requests that a Home Economist be named to the Advisory Board of the Western Regional Rural Development Research Center;

Home Economics faculty be included on technical committees and task forces relating to rural development and family living and to subcommittees of the Rural Development Center.

MOTION CARRIED.

Director P. J. Leyendecker moved, seconded by Director C. E. Clark, that Western Directors acknowledge the receipt of the revised, updated, June 1973 report of WHERAC functions and that this report be referred to the Forward Planning Committee for consideration.

MOTION CARRIED.

Director P. J. Leyendecker moved that the WHERAC resolution on Human Nutrition Research in the Western Region as Determined by WHERAC be referred to the Regional Research Committee for consideration.

MOTION CARRIED by consent.

18.0 WSRAC Report - Wood

WSRAC has not met since our Spring 1973 meeting.

19.0 ARS Report - Thomas

Dr. Thomas reported that the goals of the Western Region of ARS in the past year have been to develop closer working relationships with the State Agricultural Experiment Station Directors; to make the positions of Research Leader and Location Leader effective; and to establish closer working relationships with other Regional Federal Agencies, such as Soil Conservation Service, Environmental Protection Agency, Forest Service, and Bureau of Reclamation. Progress has been made toward these goals.

He listed some of the goals for the current year as follows:

- . Work toward more effective short and long range planning in cooperation with all agencies engaged in research within the western region
- . Review their program, both locally and regionally, to determine what adjustments in funds and personnel are needed to allow them to accomplish their role more effectively
- . Develop closer working relationship with Cooperative Extension Service system

- . Have formal, in-depth program reviews with ARS' National Program Staff
- . Involve Technical Advisors in coordinating related ARS research across Area and Regional lines
- . Establish national coordinating committees as needed
  - Agricultural Marketing Research Coordinating Committee
  - ARS Working Group on Natural Enemies of Insects and Weeds
  - ARS Germ Plasm Coordinating Committee

#### 20.0 ERS Report - Juers

Dr. Juers reported that the reorganization of ERS is progressing. They have been reviewing the new program areas and the projects under them. In the process of reorganization, ERS will be cutting down the number of projects by more than half. The replacement of the research projects with divisional work plans will necessitate changing the CRIS files. The plan is to correlate the CRIS files with the larger aggregations of project units. Presently, ERS is working towards enlarging the scope of their relations with the Land-Grant universities and maximizing participation in regional research.

#### 21.0 EPA Report - Bartsch

Dr. A. F. Bartsch of the Environmental Protection Agency spoke to the relationships between EPA and agricultural research agencies.

He stated that EPA, as a regulatory agency, is charged with the protection of the environment from the effects of pollutants. In order for EPA to develop reasonable regulatory procedures, the best and most complete information must be accessible. In line with this need, there are four National Environmental Research Centers that perform EPA's in-house research programs. Dr. Bartsch made reference to a brochure, aimed specifically at the regional structure, which identifies personnel, programs and functions of EPA.

Because of the commonality of concerns in areas related to the impacts of pollutants among agricultural research agencies and EPA, he stressed the need to work together. EPA presently does only 20 per cent of pollutant research; experiment stations and other research agencies carry on the bulk of research in this area. Dr. Bartsch then gave examples of inter-agency agreements between EPA and ARS, USDA at Beltsville, and the Forest Service.

Dr. Bartsch will provide copies of the EPA brochure to Dr. Wood who will in turn distribute them to Directors.

## 22.0 Centennial Program Committee Report - M. L. Wilson

At the 1972 Land Grant Meetings, a resolution was passed designating 1975 the centennial of the American Experiment Stations. A committee of 13 was appointed to carry out this assignment with Roy Kottman, Doyle Chambers, Boysie Day, and Paul Waggoner appointed as co-chairmen. Although the expense of travel has prevented the committee from meeting as an entire group, they have made excellent progress through correspondence, individual small groups, and by telephone. A summary of their planning and achievements is as follows:

- A centennial stamp has been proposed by Congressman Giaimo and sent from the Post Office to their Citizens Advisory Committee. The Secretary of Agriculture and the Governor of Connecticut have written in support of the stamp.
- The Chairman of the Experiment Station Section has arranged for the Centennial Committee to meet at the 1973 Land Grant Meeting in Denver.
- The Chairman of the Division of Agriculture has forwarded, through channels, a request for a place among the plenary sessions of the 1975 Land Grant Meeting for recognition of the Stations.
- A subcommittee designated as the Centennial Ceremony Committee has been delegated to make specific and detailed arrangements for commemorating the centennial of the American Experiment Stations at the 1975 Land Grant Meeting in Houston. The members of this Committee consist of Dr. Doyle Chambers, Chairman, Dr. J. E. Miller, Vice Chairman and Local Arrangements, Dr. R. M. Kottman, Dr. J. S. Robins, and Dr. P. E. Waggoner. It is



planned to have the President and the Secretary of Agriculture present for this ceremony. Members of the House and Senate Committees on Agriculture also are to be invited.

- In the near future, an advisory or editorial committee for the documentaries (book and film) must be designated and writing begun. An outline of the documentary has been developed.
- On June 29, 1973, a small committee met in Washington, D.C. with Mr. Claude Gifford and Mr. Harold Taylor of the Office of Information to present plans which relate to the centennial of the Experiment Stations, and to gain the support of the Office of Information for these efforts. The efforts which are planned for the centennial include telling what the Experiment Stations are doing and also telling how they affect man's past, present, and future. The mechanisms of telling the story are through the proposed issuance of the U.S. commemorative stamp, a Centennial Ceremony at the 1975 Land Grant Meeting in Houston, Texas, the development of a special book, and the production of a documentary film.

Director Waggoner had a proposed outline developed for the Commemorative Book. The book would be devoted primarily to the story of the State Agricultural Experiment Stations including how they were formed, their contribution to our country's progress, their future role, and their overall importance. Included would be examples of their cooperative efforts with the Agricultural Research Service, Economic Research Service, Forestry Service, Extension Service, as well as their role in training America's present and future agricultural scientists. Mr. Gifford was receptive to the idea that this book might be the 1975 Yearbook of Agriculture. If the Yearbook of Agriculture idea is successful, these notes would be altered accordingly with the policies of the Yearbook Committee. Mr. Gifford is exploring with the Office of the Secretary of Agriculture and essential congressional leaders the idea that the 1975 Yearbook be devoted to this topic. If this is successful, the implications to the State Agricultural Experiment Stations are numerous. Included would be the fact that this Yearbook would represent a contribution by the Department of Agriculture of approximately \$400,000 relative to the celebration of our centennial.

It must be recognized that not all Experiment Stations could be provided coverage and depth in such a volume. However, every effort would be made to include all stations to a degree, as appropriate.

It would be hoped that as many illustrations as possible might be used in such a text. However, illustrations are increasingly expensive, and the use of black and white in lieu of color might have to prevail in many cases. Many of these details will require exploration in depth. The \$400,000 expended by the USDA in the development of this Yearbook would provide approximately 250,000 copies. It was estimated by those present at the meeting that a total of one million yearbooks might be needed to meet the overall distribution and sales which are contemplated. Thus, an additional \$250,000 will have to come from Station purchases or individual purchases. In regard to this, it is essential that the State Stations be prepared to go on record very shortly relative to the outlay which they are willing to make either for Fiscal Year 1974 or the Fiscal Year 1975 resources for the centennial book.

Parallel with the preparation of the yearbook would be a thirty-minute color and sound film of top quality which would cover highlights of the same subject matter as the book. Such a film, or segments thereof, could be suitable or could be adapted and used for local showing by any State Experiment Station. The book and the film would be prepared for an urban audience. Copies of the film could be made available for each state. The premier release of the yearbook and showing of the film would be at the 89th Meeting of the National Association of State Universities and Land Grant Colleges scheduled for November, 1975, in Houston, Texas. A tentative budget for development of the film was estimated to be \$100,000 to \$125,000. A suggested distribution of costs for the film is as follows: CSRS, \$25,000; ARI, \$25,000; SAES, \$50,000; Department of Information, \$25,000; total, \$125,000. An equitable portion of the cost of financing the film by the State Agricultural Experiment Stations would probably be arrived at on the basis of the Hatch formula distribution. Individual state contributions would probably vary from \$500 from smaller states to \$2,500 from the larger states. Approval for funding by all agencies listed above is pending and will be arrived at during the summer meetings for each region of State Experiment Stations. The Department of Information must also have clearance with the Secretary for preparation of a

special yearbook covering accomplishments of State Stations. The above commitment for the film will also need to be accepted and agreed upon by the ARI, CSRS, and the Department of Information. The committee earnestly requests your assistance and support.

Dr. J. S. Robins moved, seconded by Director M. L. Wilson, that Western Directors endorse the preparation of a documentary film and yearbook for the Centennial Program of American Experiment Stations and that through such endorsement, the individual Directors pledge their participation in providing information and materials and the necessary financial support to assure these developments.

MOTION CARRIED.

### 23.0 ARI Report - Baldwin

Dr. Baldwin reviewed briefly the history of the Agricultural Research Institute. ARI was reorganized in October 1972, and now has 137 members (30-SAES, 11-Government agencies, 2-regional associations and a number of scientific societies). This reorganization provided for one class of membership, all dues-paying, and for the legal separation of the National Academy of Sciences and the Agricultural Research Institute. ARI uses NAS space and services but is a separate, incorporated entity. However, ARI hopes and intends to maintain close liaison with NAS. ARI is developing a statement on needs for agricultural research which will be sent to Congressional committees, etc.

The Agricultural Board of the National Academy of Sciences - National Research Council has also been reorganized, and will henceforth be called the Board of Agriculture and Renewable Resources (BARR). In the past, ARI provided some financial support for the Board and worked in close liaison with the Board. ARI will continue to support BARR with as much money as possible and with names of people to serve on BARR committees. It will also provide study panels to coordinate with BARR.

The new ARI has drawn a lot of attention from various places. Following is a list of some of the activities of which ARI has been asked to participate and/or is involved:

- . Supply three members to assist with the evaluation of more than 300 research proposals in the field of agriculture for the second ERTS satellite program.

- . Have a representative on the Space Applications Board of the National Academy of Engineering to represent agriculture in the field of space applications. This Board was organized at the request of NASA to provide liaison with the scientific community outside of NASA.
- . Offer of ARI to participate and work with the Bicentennial Celebration Committee of USDA in the development of a more complete program to commemorate 200 years of agricultural research in this country.
- . Have a representative at the Board of Agriculture and Renewable Resources' meetings, and work in close cooperation with them.
- . At the encouragement of the Agricultural Board, the ARI Executive Committee appointed a select committee to make comments on the "Pound Report". This has been done; the comments are of a more constructive nature than those that have appeared in "Science". ARI is presently trying to determine the best way to make these available to the scientific community and legislative groups that may wish to review them.
- . Provide a statement to the Chairmen of Congressional Committees on ARI's overall concern for the need to continue agricultural research on an aggressive basis.
- . Revitalized the Newsletter of ARI in the hope that this may be a means of increasing communication among leaders of agricultural research.

Most of the objectives set forth in FY 1972-73 have been accomplished: membership has been increased, ARI has been incorporated, an office has been developed, and an Executive Secretary has been hired. The objectives for FY 1973-74 will include a reorganization of active programs, the encouragement of experiment station people to be more active in the Institute and to meet the needs of experiment station directors. To accomplish these objectives, ARI has requested ESCOP to appoint a committee to make recommendations to ARI of activities and programs that would be most helpful to the experiment stations, and similar requests have been made of government agencies and industry.

Dr. Baldwin stated that the Agricultural Research Institute is unique in that it represents the state experiment stations, many government agencies, scientific organizations, and leaders of agricultural research in the agribusiness community. Nowhere else in the world is there such a group working together on a common purpose. He further stated that he believes we have a unique opportunity to work together on subjects that are vital to the current programs to improve the production efficiency, processing, and handling of our food and fibers.

24.0 "Agricultural and Water Policies and the Environment" - C. P. Wilson/W. E. Johnston

Director Wilson introduced the background of this subject. Dr. W. E. Johnston, a member of WAERC's Committee to Review the Heady Report, presented the report, "Review and Critique: Agricultural and Water Policies and the Environment". (copy appended as Appendix 24.0)

Considerable discussion followed. Western Directors commended Dr. Johnston and WAERC for an excellent review especially in view of the short time span allotted. It was suggested that WAERC consider making a further review of land use policy implications of this and related reports and developments. WSWRC was also asked to review the report and study its implications.

25.0 Rural Development Subcommittees: ESCOP and Division of Agriculture - Nielson

25.1 ESCOP Rural Development Subcommittee

The purpose of this Subcommittee is to give thought to the content or direction of research program development. Because the states have considerable research underway in rural development, and because the Chairman of the Subcommittee considered it unlikely that stations would place high value on guidance from the Subcommittee, a meeting of this group has never been called.

25.2 Rural Development Committee, Division of Agriculture, NASULGC

25.21 Legislative Activities

Dean S. O. Berg of Minnesota, then Chairman

of the Committee, was one of 24 people to testify on the implementation of the Rural Development Act before the Rural Development Subcommittee of the Senate Committee on Agriculture and Forestry on March 28, 1973. This Subcommittee is chaired by Senator Clark of Iowa. Dean Berg's testimony was well received. A byproduct of his testifying was that a staff member of the Senate Committee expressed a desire for a Seminar on overall programmatic funding problems of the Land Grant institutions.

#### 25.22 Meeting of Rural Development Committee

A meeting was called by the new Chairman, Elmer R. Kiehl of Missouri on July 16, 1973 in Chicago.

#### 25.221 Proposed Guidelines for Pilot Program Under Title V

Previously, USDA had developed proposed guidelines for rural development programs and distributed them to the states in April. Proposed rules and regulations were published in the Federal Register June 21, 1973.

The main item of concern before the Committee related to regulations was that rural development programs in states would be subject to provisions of OMB Circular A-95 (February 9, 1971). This means that state research and extension programs under Title V would be subject to review in the Governor's office (although "approval" is not implied).

The Committee recognized the need for close liaison with the state agencies in carrying out rural development programs. However, we were also concerned about opening the doors to state reviews of all State Agricultural Experiment Sta-tion and Cooperative Extension Service programs.

The Committee passed a resolution strongly opposing this section of

the proposed rules and forwarded the resolution to Secretary Butz, Assistant Secretaries Long and Irwin, and Dr. Lovvorn and Dr. Kirby.

On July 3, 1973, ESCOP sent lengthy documentation against the provisions to USDA. The Committee endorsed the action.

On behalf of the ESCOP Legislative Subcommittee, Chairman Roy Kottman sent a letter to Assistant Secretary Long on July 9, 1973, calling attention to certain inconsistencies in the rules and urging changes similar to the ones the Committee suggested.

#### 25.222 Location of Regional Rural Development Centers

The rules as published in the Federal Register state that "each Regional Rural Development Center will be established by the administratively responsible..." The Committee considered this statement ambiguous and forwarded a request for clarification to Mr. Long so that: (1) centers previously designated would continue for purposes of regional work under Title V of the Rural Development Act of 1972, and (2) regional experiment station and extension directors would have a substantial policy impact to the host university.

Director J. M. Nielson moved, seconded by Director R. K. Frevert, that Western Directors approve the designation of the Western Region Area Development Research Center located in Oregon as the official Western Regional Rural Development Center for the purpose of Title V of the Rural Development Act of 1972.

MOTION PASSED.

## 25.223 National Conference

The Executive Committee of the Division of Agriculture requested the Rural Development Committee to take leadership in developing a national conference.

There was considerable discussion at the July 6 meeting regarding the need for a national conference, what the objectives would be, who the audience would be, and the pros and cons of a national conference versus regional conferences, etc. The Directors of the Regional Rural Development Centers were then asked to serve as a planning committee, to be chaired by Dr. Kiehl, along with Dr. Jim Hildreth of the Farm Foundation, to develop a program for the conference. It was implied that the North Central regional center be deeply involved, inasmuch as it was anticipated that the conference would be held in Iowa as requested by Senator Clark.

The latest information from the planning committee indicates that a national conference is being planned for November 25-27, 1973, to be held in Des Moines, Iowa. It will be sponsored by NASULGC, the Senate Subcommittee on Rural Development, and the House Subcommittee on Rural Development. It was proposed to select the audience from state rural development councils, traditional farm organizations and agriculturally oriented groups, in-state rural development groups where these persons differ from state councils, leadership and policy committees of urban oriented groups, etc.

The short-run objective of the conference would be to solidify a new constituency behind a more humanistic definition of rural development,



with the necessary redefinitions of needed research and education that this entails. The longer-run objective would be to focus on action toward development in the new, humanistic model with laymen recognizing research and education as an integral part of this.

As part of the national conference, an evening dinner and discussion is being planned by the regions.

Considerable discussion followed the formal report concerning the proposed National Rural Development Conference. Who would attend, who would reimburse their travel costs, is the meeting to be primarily political? Further information is anticipated later from the Committee and other sources.

## 26.0 Western Regional Planning Committee Report - C. P. Wilson/Gaines

Director Wilson reported that on July 16, 1973, Chairman Wood requested that he replace Dr. B. E. Day as state-side Co-chairman of WRPC. On August 10, 1973, a meeting of the WRPC Co-chairmen was held; DAL Buchanan and Dr. Joseph M. Roop of the DAL staff were also present. At this meeting, Dr. Edward M. Gaines of the Forest Service, located in Co-chairman Camp's office was designated Secretary of WRPC. A meeting of the Co-chairmen of the Research Program Groups is called for September 19, 1973.

The following are Director Wilson's interpretations and personal views of the present status and implementation of the regional and national planning system.

For two years, the organization for regional and national planning has been:

- Agricultural Research Policy Advisory Committee (ARPAC)
- Agricultural Research Planning and Facilities Subcommittee of ARPAC (ARPF)
- Regional Planning Committees (RPC's)
- Research Program Task Forces (RPTF's)

ARPAC is presently undergoing a possible reorganization; hence, it is not clear what kind of a national committee we will have.

Most of the members to the RPG's have been named, but no RPG has been activated as yet in the west. Director Wilson stated that he will obtain names of the Extension representatives and has asked Director Buchanan to obtain the names of ARI representatives to each of the RPG's.

In order to implement the planning system, Director Wilson believes we should begin with a statement of the mission of the National Planning and Implementation System. Such a statement might be as follows:

"To make optimum use of the agricultural research resources made available to the public research agencies of the United States, having due regard for the varying conditions in the several regions of the nation."

The Western Regional Planning Committee should then state its goals consistent with the statement of the National Planning and Implementation System. The goals should be stated in quantifiable and measurable terms with interim goals indicated for the purpose of analyzing progress.

Each Research Program Group should develop a set of objectives having due regard for varying conditions in the subject-matter areas.

Finally, each Research Program should develop a five-year plan of work based on a system of priorities, having due regard for the various disciplines.

In summary, the national mission would be the guideline by which the regional goals are set. The regional objectives would contribute to the regional goals which would necessarily contribute to the national mission. The five-year plans of work, then, would contribute to the objectives, goals and mission.

Director Wilson proceeded to outline some of the things we can expect from the planning process.

- . As administrators of research resources, we will have more complete information and better methods

and procedures by which to make decisions on research priorities.

- . We can more clearly identify areas of research that are of regional and national scope and those of local interest.
- . We can facilitate research across state and agency lines to maximize the return for each dollar made available.
- . We can more accurately identify the nature and sources of research funding with the nature of the research being undertaken. Thus, we can answer such questions as, "Is it more appropriate to seek industry support, support from State Legislatures, or support from the Federal Congress? Is formula funding, grant funding, or regional research funding more appropriate?"

Each station and USDA research agency has made five-year forward projections (FY 1971-FY 1976) in terms of SMY's under certain constraints. Projections for FY 1972-FY 1977 are in progress. These projections represent judgments by individual administrators. The data have not as yet been subjected to analysis.

Ultimately, the planning process should yield answers to the following questions:

Do these projections represent

- . a balanced program?
- . a balance between SAES, USDA and private industry research?
- . a balance among subject-matter areas?
- . a balance among geographical locations?
- . a balance among disciplines?

What criteria can be established by which these projections can be tested?

How can we improve resource allocations, implied by the projections, so as to assure optimum allocations?

As resources become available through completion or termination of current work or through new resources, how can we identify important new needs?

What are our priorities?

How do we arrive at our priorities?

Director Wilson concluded his report with a few words of caution. He stated that we, as administrators, need to seek and heed the advice from our customers and our researchers. Regional and national planning will succeed only if we have a national and systematic planning procedure in our state stations and USDA research agencies where the research is performed.

#### 27.0 USDA Patent Provisions - Frevert

Director Frevert called attention to Exhibit A of the Patent Provisions, 7 AR 185 dated 4-23-68 as a matter of information. (A copy of Exhibit A follows at the end of this report.)

He stated that the patent provision marked "Exhibit A" is essentially the same as the previous agreement except for the last 13 lines which state that "in the event the invention is made solely by an employee or employees of the cooperator....." the cooperator shall make certain rights available to the Government. Since the Broad Form Agreement covers the whole area of agricultural sciences, it would appear that the Government could claim certain patent provisions on any work being done by the Experiment Station even if it did not make any contribution to the invention. Dr. Frevert reported that after considerable discussion, the Arizona Station and the Agricultural Research Service agreed on a restriction which would allow patent privileges to the Federal Government only in the case of a jointly financed effort.

7 AR 185, 4-23-68  
Public

## EXHIBIT A

## PATENT PROVISIONS

Any invention resulting from this cooperative work and made jointly by an employee or employees of the United States Department of Agriculture and the cooperator or an employee or employees of the cooperator shall be fully disclosed, either by patenting in the United States, and any such United States patent shall either be dedicated to the free use of the people in the territory of the United States or be assigned to the cooperator, as may be mutually agreed upon by the parties hereto, provided, that in the event of assignment to the cooperator, the Government shall receive an irrevocable, nonexclusive, royalty-free license under the patent, throughout the world, to practice the invention for all governmental purposes, and, provided further that nonexclusive, royalty-free licenses shall be issued by the cooperator to any and all applicants technically competent to make use of the patent, provided, that, where the assignment is to the Government, it shall be of the domestic patent rights. Where the domestic patent rights are so assigned, the United States Department of Agriculture shall have an option to acquire the foreign patent rights in the invention on which an application for a United States patent is filled, for any particular foreign country, said option to expire in the event that the Government fails to cause an application to be filled in any such country on behalf of the Government or determines not to seek a patent in such country within six months after the filing of the application for a United States patent on the invention. Where the domestic patent rights are assigned to the Government, but the foreign patent rights are retained by an employee, the employee shall grant to the Government a nonexclusive, irrevocable, royalty-free license in any patent which may issue thereon in any foreign country, including the power to issue sublicenses for use in behalf of the Government and/or in furtherance of the foreign policies of the Government, and said license shall also include the power to sublicense American licensees under Government-owned United States patents to practice the invention without payment of royalty or other restriction in any foreign country wherein a corresponding patent may issue to the employee or his foreign assignee. Any invention made independently by an employee or employees of the United States Department of Agriculture or by the cooperator or an employee or employees of the cooperator shall be disposed of in accordance with the policy of the United States Department of Agriculture or the cooperator, respectively, provided that in the event the invention is made solely by an employee or employees of the cooperator, the cooperator shall grant or shall obtain from the assignee

of any patent issued on said invention an irrevocable, non-exclusive, world-wide, royalty-free license for the Government, for all governmental purposes, and provided further, in the event the invention is made solely by an employee or employees of the cooperator, that unless the cooperator or his assignee has taken effective steps within three years after a patent issues on the invention to bring the invention to the point of practical application or has made the invention available for licensing royalty-free or on terms that are reasonable in the circumstances, or can show cause why he should retain the principal or exclusive rights for a further period of time, the Government shall have the right to require the granting of a license to an applicant on a nonexclusive, royalty-free basis.

28.0 IR-4 - Rasmussen

Director Rasmussen reported on the intensified and coordinated program for pesticide clearances for minor use.

In recognition of the diminishing number of pesticides registered for minor (limited) use, special effort is being made cooperatively by USDA, EPA, State Experiment Stations, and the IR-4 Technical Committee to develop a working relationship and a system that will ensure the use of essential pesticides. Administrator Roy Lovvorn's July 13, 1973 memo on the subject clearances for minor use registrations outlined the situation and briefly indicated the initial approach. Subsequently, memos from Dr. V. H. Freed, Western Regional Technical Representative to IR-4, outlined in more detail a plan that we worked out to mobilize the talents of our state liaison representatives. These liaison representatives will need the whole-hearted cooperation of the Director's office together with the departments concerned with pesticidal use in reviewing the state needs and compiling a list on a priority basis of those pesticides considered essential to the agriculture of the state.

The plan is to get from each state a list of needed pesticides and then ask an ad hoc regional committee to prepare a regional listing. These lists are to be used as guides by scientists, liaison representatives, IR-4 technical people, and EPA in obtaining the necessary data in support of clearances (registration and label) for the most needed chemicals. Director Rasmussen urged Directors to have this list completed by September 1, 1973.

The IR-4 project is being expanded to be more effective in seeking clearances of minor chemicals, but the job is far too large to be left to IR-4 alone. However, working cooperatively with the states, the regions, USDA, and EPA, hopefully the most urgent needs can be met reasonably soon and then subsequently meet lower priority needs. The plea of the IR-4 Technical Committee is for an effective, planned effort in every state relying on the liaison representative for guidance to identify needs, to help plan research to get the kind of data needed and, through the IR-4 program, aid in getting the necessary EPA clearances.

## 29.0 Human Subjects in Research - Hilston

Director Hilston raised a policy question concerning human subjects in research.

A policy statement on this subject was issued as Secretary's Memorandum No. 1755 dated November 12, 1971. The statement is reproduced as follows:

"Safeguarding the rights and welfare of people used as subjects in research projects conducted by the Department or supported by the Department is a responsibility of the USDA agency conducting the research and the University or other institution responsible for projects conducted with funds made available through the Department. It is our policy that such research must protect the rights and welfare of the subjects, must assure that risks do not outweigh either potential benefits to the subjects or the expected value of the knowledge sought, and must assure each person the right of adequate and appropriate informed consent.

The applicability of this policy is more obvious in medical and biological science research involving procedures that may be potentially harmful to persons used as subjects of study. It applies also to economic, social, and behavioral research that may involve varying degrees of discomfort, irritation, or harassment of persons or groups and to research in which rights of privacy of persons must be safeguarded by confidentiality of information obtained and by proper use of findings.

In all research projects covered by this policy, selection of persons or groups for study shall be made without regard to sex, race, color, religion, or national origin unless these characteristics are factors to be studied. Any investigator planning a project that includes these characteristics as factors for classification must outline his plans and the justification for them clearly in his project statement and must obtain written approval of such plans from the director of the responsible agency before initiating research. Appropriate documentation should be kept when research includes members of minority groups selected as subjects of study because of their minority status.

To protect the safety and welfare of people who are subjects of research and to protect the researcher and his institution against liability when human subjects are involved in a study, each proposed project supported by USDA funds must be reviewed and approved by a



committee named for the purpose by the director having responsibility for the research. The committee may include scientists other than the principal investigator, lay consultants, and legal advisors as deemed appropriate by the director. Documentation of the project must include the results of such review and recommendations of the reviewing committee.

This policy is consistent with recommendations of the Agricultural Research Policy Advisory Committee. Also, it is deemed to be consistent with existing policy of the U.S. Department of Health, Education, and Welfare, Public Health Service as expressed in DHEW Grants Administration Manual, Chapter 1-40, 'Protection of Human Subjects.'

Institutions that are in compliance with HEW rules will be in conformance with the USDA policy. If an institution receiving research funds from the USDA has applied to the Department of Health, Education, and Welfare for a research grant or contract involving human subjects and is in compliance with the rules set out in the Department of Health, Education, and Welfare Grants Administration Manual, Chapter 1-40, then that institution will be deemed to have met USDA requirements. It is the responsibility of the CSRS to ascertain such compliance with respect to institutions receiving funds through that agency and the responsibility of other Department agencies making grants for research to institutions not receiving funds through CSRS to ascertain such compliance on the part of these institutions.

In cases where no HEW funds are involved, the appropriate USDA agency will require institutions to meet the requirements set out in the DHEW Grants Administration Manual."

### 30.0 Joint Meeting with Extension Directors - Bohmont

Director Bohmont reported that at the July 1973 meeting of Extension Directors the item of joint meetings was discussed. Extension Directors expressed the desire to meet with Experiment Station Directors biennially rather than annually. The Extension Directors passed a motion that the representatives of the Legislative Subcommittees of ECOP and ESCOP meet once a year. They suggested that the Experiment Station Directors identify a Director who would meet with them on a regular basis; this person would act as liaison representative.

Discussion suggested that the Executive Committee select a person to meet with the Extension Directors. Following the selection, the Chairman will notify the person selected and the Chairman of Extension Directors. This item will be reported at the Fall 1973 meeting.

### 31.0 Collaborators Conference - Thomas

On behalf of Director A. I. Morgan, Jr. of the ARS Western Regional Research Laboratory, Dr. Thomas presented three topics for consideration for the Collaborators Conference. The topics were:

- 1) Trace Elements in Food
- 2) Agriculture and Energy Situation
- 3) Biologically Active Substances

Western Directors voted Biologically Active Substances to be the theme for the 1974 Collaborators Conference.

### 32.0 Election of Officers - Kendrick

On behalf of the Nominating Committee, Director J. B. Kendrick, Jr. made the following nominations:

Officers of WAAESD:

Chairman	- L. D. Swindale
Vice Chairman	- G. B. Wood
Secretary	- J. B. Kendrick, Jr.
Treasurer	- J. A. Asleson
Recording Secretary	- Nancy Raphael
Director-at-Large	- M. T. Buchanan
ARPAC Representative	- M. T. Buchanan

Regional Research Committee:

Chairman	- W. H. Foote
2 Years	- C. E. Clark
3 Years	- D. D. Johnson
Alternate	- A. F. McCalla

## Committee of Nine:

1 Year	- L. C. Ayres
2 Years	- M. J. Burris
Alternate	- M. L. Wilson

## ESCOP:

1 Year	- D. W. Bohmont
2 Years	- P. J. Leyendecker
3 Years	- J. M. Nielson
Alternate	- A. M. Mullins

## ESCOP Legislative Subcommittee:

2 Years	- D. W. Bohmont
3 Years	- J. M. Nielson

## ESCOP Marketing Subcommittee:

1 Year as Needed	- J. M. Nielson
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## Executive Committee:

1974	- L. D. Swindale
	- G. B. Wood
	- J. B. Kendrick, Jr.
	- J. A. Asleson
	- W. H. Foote

## Forward Planning Committee:

1974	- G. B. Wood
	- M. T. Buchanan
	- D. W. Bohmont
	- J. M. Nielson
	- L. C. Ayres

## Administrative Advisors:

WAERC	- C. P. Wilson
WSWRC	- R. K. Frevert
WSRAC	- G. B. Wood
WHERAC	- P. J. Leyendecker

## W-115 Advisory and Technical Committee:

1974	- M. L. Wilson
	- D. L. Oldenstadt
	- M. T. Buchanan

Director J. B. Kendrick, Jr. moved that Western Directors approve the above nominations.

MOTION CARRIED by consensus.

33.0 Proposed Two-Day Meeting on Regional and National Planning - C. P. Wilson

Director Wilson stated that following the meeting of the RPG Co-chairmen, where guidelines and procedures would be developed, a meeting should be called by the Co-chairmen of each of the RPG's. When there is feedback to RPC, it may be useful to hold a special meeting of Western Directors to make an assessment. It is estimated that such a meeting may be called some time following January 1974.

34.0 Future Meetings

Chairman Wood announced that the spring 1974 meeting will be held in Las Cruces, New Mexico; the summer 1974 meeting will be held in the state of Washington. Meeting places for 1975 are still open. It was tentatively decided that the spring 1975 meeting would be held in California.

35.0 Resolutions - Dugger

On behalf of the Resolutions Committee, Director Dugger presented the following resolutions:

35.1 Resolution 1

WHEREAS, the Western Association of Agricultural Experiment Station Directors, their wives and guests, are about to complete a successful and worthwhile meeting at Newport, Oregon, and

WHEREAS, the hospitable arrangements made by our hosts at the Marine Science Center, and along the Oregon Coast have facilitated the work of the Association, inspired communications amongst its members and brought about a greater appreciation of the agricultural production of cheeses and wine, as well as that from the ocean,

NOW THEREFORE, BE IT RESOLVED, that the Western Association of Agricultural Experiment Station Directors, representatives of the Agricultural Research Service, Economic Research Service, Forest Service, and their guests express their appreciation to Director Burt Wood, Dean Wilbur T. Cooney, Directors W. H. Foote, R. W. Henderson, David P. Moore, their spouses and/or staff of the Oregon State University for the excellent planning, warm hospitality, transportation arrangements, and all other special considerations and activities.

### 35.2 Resolution 2

WHEREAS, Dr. Boysie E. Day returned to teaching and research as Professor of Plant Physiology at the University of California, Berkeley, on July 1, 1973, and

WHEREAS, he has served as plant physiologist, professor, department head, Director of the Citrus Research Center, Associate Director and later statewide Director of the California Agricultural Experiment Station, and

WHEREAS, he has given scholarly guidance as chairman of the National Academy of Science-National Research Council committees on weed control and pesticides, president of the Weed Science Society of America in 1969, and invited speaker before the American Association for the Advancement of Sciences in 1969 and 1970, and

WHEREAS, Dr. Day has served the Western Association of Agricultural Experiment Station Directors as Secretary, Chairman of the Regional Research Committee, Co-chairman of the Western Regional Planning Committee, and Administrative Advisor of various technical committees, and

WHEREAS, over 25 years he has won national and international distinction as a scientist, teacher, speaker, author, and administrator, and has served his station, the western region and the nation faithfully,

NOW THEREFORE, BE IT RESOLVED, that the Western Association of Agricultural Experiment Station Directors extends to Director Day appreciation for his friendship, leadership, contributions,

and faithful service to the Association and extends to him its best wishes for his role as a faculty member at the University of California, Berkeley, and

BE IT FURTHER RESOLVED, that the Western Association of Agricultural Experiment Station Directors present to Director Day an appropriate Director Emeritus Certificate in appreciation of his services and contributions.

### 35.3 Resolution 3

WHEREAS, Dr. Louis E. Hawkins, former Director-at-Large, Southern Association of Agricultural Experiment Station Directors, died July 21, 1973, and

WHEREAS, Dr. Hawkins served with distinction for many years as Director of the Oklahoma Agricultural Experiment Station and served as the first Director-at-Large for the Southern Agricultural Experiment Stations,

NOW THEREFORE, BE IT RESOLVED, that the Western Association of Agricultural Experiment Station Directors extends its deepest sympathy and condolence to his wife, Mrs. Margaret Hawkins, for the loss of her husband Louis, and

BE IT FURTHER RESOLVED, that the Chairman of the Western Association of Agricultural Experiment Station Directors be directed to convey this message of bereavement and respect to Mrs. Hawkins on behalf of the Western Agricultural Experiment Station Directors.

### 35.4 Resolution 4

WHEREAS, Dr. Nathaniel T. Coleman, Associate Dean of the College of Biological and Agricultural Sciences at the University of California, Riverside, died on August 1, 1973, and

WHEREAS, Dr. Coleman has brought honor to his discipline of soil science and served his institution with distinction as professor, research scientist, administrator, Faculty Research Lecturer, and

WHEREAS, he has been recognized as Fellow and 1969 President of the Soil Science Society of America, has served his nation as advisor to the Atomic Energy Commission, has given freely of his time and talents as speaker and editor, and has provided consultative aid to international foundations and the governments of developing countries,

NOW THEREFORE, BE IT RESOLVED, that the Western Association of Agricultural Experiment Station Directors takes this opportunity to honor his memory and extends deepest sympathy and sincere condolence to his widow, Mrs. Betty Coleman, and

BE IT FURTHER RESOLVED, that the Chairman of the Western Association of Agricultural Experiment Station Directors be directed to convey this message of sympathy and respect to Mrs. Coleman on behalf of the Western Agricultural Experiment Station Directors.

#### 35.5 Resolution 5

WHEREAS, Dean Glenn S. Pound of the College of Agriculture and Life Sciences, University of Wisconsin as Chairman of a NAS Committee, which prepared the "Report of the Committee on Research Advisory to the U.S. Department of Agriculture" has been unjustly criticized for the report, and

WHEREAS, the NAS Committee members were selected for their individual scholarly competence and judgment with due consideration for the balance of breadth of disciplines, they were charged with examining the quality of science in agriculture and not agricultural research per se, and

WHEREAS, the Western Association of Agricultural Experiment Station Directors, although not endorsing the individual recommendations of the report -- all of which are deserving of careful and judicious consideration,

NOW THEREFORE, BE IT RESOLVED, that the Western Association of Agricultural Experiment Station Directors commends Dean Pound for his firm stand and urges that considerations and discussions of the NAS Committee's recommendations be carried out in the spirit of scientific objectivity.

## 35.6 Resolution 6

WHEREAS, President R. W. MacVicar of Oregon State University welcomed the Western Association of Agricultural Experiment Station Directors to their summer meeting at the Oregon Marine Science Center, Newport, Oregon, August 15, 1973, and

WHEREAS, President MacVicar is an effective and experienced spokesman for agricultural research, having conducted research highly relevant to agriculture as a Biochemist and administered at various university levels research and teaching programs supportive to the broad responsibilities of the Land Grant Universities, and

WHEREAS, President MacVicar is vitally interested in carrying the message of agricultural research to the users and benefactors of research, and to Legislative bodies as demonstrated by the conduct of his duties as President of Oregon State University,

NOW THEREFORE, BE IT RESOLVED, that the Western Association of Agricultural Experiment Station Directors departs from custom and asks President MacVicar to become an Honorary Member of the Association and to actively participate at the regional and national levels in carrying the story of this nation's agricultural research needs to all policy making bodies, to other University Presidents and to the consuming public, and

BE IT FURTHER RESOLVED, that the Western Association of Agricultural Experiment Station Directors directs the preparation of a suitable certificate of honorary membership and presents it to President MacVicar at the November 1973 meeting of the National Association of State Universities and Land Grant Colleges.

Director W. M. Dugger, Jr. moved that Western Directors approve the above resolutions.

MOTION CARRIED by consensus.

36.0 Adjournment

The meeting adjourned at 10:00 a.m., August 17, 1973.



## APPENDIX 6.1

## MINUTES

JOINT MEETING OF FORWARD PLANNING COMMITTEE  
AND EXECUTIVE COMMITTEEWESTERN ASSOCIATION  
OF AGRICULTURAL EXPERIMENT STATION DIRECTORS

August 14, 1973

Present: G. B. Wood, Chairman, Executive Committee  
C. P. Wilson, Chairman, Forward Planning Committee  
R. E. Ely, Forward Planning Committee  
D. W. Bohmont, Forward Planning Committee  
J. A. Asleson, Executive Committee (Treasurer)  
M. T. Buchanan, Forward Planning Committee and  
(Acting Secretary)

The meeting was called to order by Chairman Wood at 4:00 p.m.

Chairman of FPC C. P. Wilson reported on FPC deliberations and actions per Executive Committee Agenda:

- a) Utilization of \$20,000 for staff support for regional and national planning

In keeping with prior FPC recommendations and WD action, the Chairman of Executive Committee, Wood, after consultation with members of Executive Committee, authorized the appointment of Joe Roop as a Post Doctorate Planning Associate in the Office of the Director-at-Large.

- b) Longer range programming of staff support for regional and national planning

With Joe Roop of SAES, Ed Gaines of FS and Bob Olsen of ARS the staff component is adequate for the present. No further recommendation is made at this time.

- c) Secretarial services for Western Regional Planning Committee

The co-chairmen of RPC have recommended and Ed Gaines, FS, has agreed that Ed Gaines will serve as Secretary of RPC.

e) Recording Secretary position and function

The Executive Committee at its meeting in January, 1973 took action to recommend the continuation of the present arrangement:

"Chairman Wood commented favorably on the Annual Report of W-106 prepared by Nancy Raphael. DAL Buchanan and Director B. E. Day added favorable comments on Nancy's performance in her roles as Recording Secretary and Administrative Assistant. After further discussion, Director D. W. Bohmont moved, Director B. E. Day seconded and the following motion was Passed:

"The Executive Committee has reviewed the position of Recording Secretary in the DAL's Office in accordance with Western Directors' action at the February 1972 meeting:

'Proceed to make arrangements under current budget constraints as are necessary to fully activate the recording secretary function of the DAL office by making the Administrative Assistant the Recording Secretary under the supervision of the DAL and the elected Secretary.....this should be done on a trial basis as quickly as possible.....'

"One year's operation with the roles of Administrative Assistant and Recording Secretary combined in one professional staff member has proven the efficiency and effectiveness of this arrangement as compared with the alternative arrangements considered earlier. Communications among members of the Western Association of Agricultural Experiment Station Directors have been improved. Thus, the combination of these positions has proven to be a success. This success is due in large part to the exceptional abilities of the incumbent, Nancy Raphael.

"The Executive Committee recommends continuation of the current arrangement indefinitely."

FPC at its June 1973 meeting asked DAL Buchanan to prepare a job description for the Administrative Assistant and the Recording Secretary. This has been done. A copy will be included with the Minutes of the August 15-18, 1973 Meeting. FPC and Executive

Committee concur with the prior action of the Executive Committee that the current arrangement be continued and that the Recording Secretary be listed with the Officers of the Association.

f) CSRS role and function

This matter has been discussed. It will be placed on the next FPC agenda for further discussion.

g) Western Regional Research Advisory Committees

Reports have been received from each Administrative Advisor. Each has recommended continuation. Discussion has ensued in FPC and Executive Committees. It is agreed presently that it is too early to make a final recommendation; further review will be made prior to the summer 1974 meeting of Western Directors.

h) Engineering Planning Center Advisory Council

At the June meeting of FPC and Executive Committee a request to establish an Advisory Council was considered. It is recommended that the Chairman, Western Directors name a representative to the Engineering Planning Center.

i) Procedure for handling requests to Western Directors for responses to Congressional requests

This matter was considered at the June meeting. It is recommended that the pattern be from Chairman of ESCOP to Legislative Subcommittee of ESCOP to Chairman, Western Directors to DAL and/or other members of the Western Association.

j) Water Resources Planning

A communication from Dean J. S. Robins requesting a western review the Heady Report was reviewed at the June meeting. Director C. P. Wilson was asked as Administrative Advisor to WAERC to seek assistance from the Natural Resources Committee of WAERC. This has been done. See Appendix 24.0 for the report.

k) Abolish Task Forces established pursuant to the Philosophy Committee recommendations

Action was taken August 13, 1973 to recommend that the Task Forces established pursuant to the Philosophy Committee recommendations be discharged. RPG's,

under the Regional and National Planning System may recommend the selective establishment of RP task forces with a charge in keeping with the Regional and National Planning Process.

1) Abolish FPC

Discussion. No change recommended.

m) Sharing costs of operating CRIS

Following discussion it was decided to seek additional information and study further. This item will be placed on the next FPC agenda.

n) Publications in western region

1) High cost - Director D. W. Bohmont will study further and report at November meeting.

2) Metric System - DAL Buchanan was asked to work with Jim Johnson, President of the American Association of College Editors and others toward development of a recommendation for action at the summer 1974 meeting.

Motion by Director J. A. Asleson, seconded by Director R. E. Ely, that the report of FPC be accepted with thanks to FPC for its usual, good job.  
Motion Passed.

(1) Funds in escrow

After discussion, it was duly moved by Director C. P. Wilson, seconded by Director J. A. Asleson, that the Executive Committee recommend to Western Directors that the Treasurer of the Association be authorized to use the escrow account at the Montana Station as a revolving fund together with carry-over funds to permit payments to California for the DAL account sufficient to keep the account at California from operating in the red. Such actions by the Treasurer are to be reported to the Executive Committee at the Summer Meeting for final approval on behalf of the Association. Motion Passed.

Director D. D. Johnson moved, seconded by Director J. A. Asleson, that Western Directors accept the recommendation of the Executive Committee. MOTION PASSED.

- (2) Evaluation of Public Support of Agricultural Research in the Western Region

This item was tabled at the last meeting due to the tightness of the budget situation. After discussion it was agreed to keep the item on the table. Oregon State University will seek a sponsor for such a study which would yield valuable information. Meanwhile, if one or more other States desire to make such a study, Oregon is in a position to offer suggestions.

- (3) Western Region Area Development Research Center (See notes of meeting March 5-6, 1973 and item on W-115, p. 59 of Western Directors Minutes, March 1973.)

After discussion it was agreed that Oregon State folks will study the matter further as Rural Development Act of 1972 and related items are clarified and appropriations made known and report back to the Executive Committee in November 1973.

- (4) Executive Vice-Chairman of ESCOP

Several recent developments were reported and discussed. It was agreed that this item is presently ESCOP business.

- (5) Federal Regional Boundaries

Discussion of recent events suggests that this item is less likely than it seemed before to be a constraint on our organization. It was agreed that it would be good to have a representative from the Office of Management and Budget explain the matter to Western Directors at a mutually convenient time. DAL Buchanan will check out possibilities and report to the Chairman, Western Directors.

- (6) Xerox-Telecopier

This is a comparatively new facsimile transmission system that is available on a rental basis. It utilizes regular telephone and Xerox equipment. This item is included for information of Directors and for information from them concerning the present availability or desire for such equipment in the states of the Western Region.

- (7) Recommendation of salary plan for DAL

Director G. B. Wood suggested that the Executive Committee study the matter of a pattern for salary recommendations for the DAL and report to the Western

Directors in November. Criteria for determination of salary level and means of reimbursement would be considered. It was agreed that this would be done. A report is to be made at the November meeting.

(8) Western Directors Special Fund at Montana

A report was received from Western Directors Treasurer Asleson (copy appended). After review, the Executive Committee agreed that this Report should be accepted, and that billing should be made to replenish the account to the \$6,000.00 level.

Meeting adjourned at 7:00 p.m.

Mark T. Buchanan  
Acting Secretary

8/15/73

Director D. W. Bohmont moved, seconded by Director R. K. Frevert, that Western Directors accept the report and approve the recommendations therein. MOTION PASSED.

FINANCIAL STATEMENT

## Western Directors' Special Fund

Cash Balance, June 30, 1972..... \$3,000.65

RECEIPTS:

Arizona	248.95
California	488.90
Colorado	338.92
Hawaii	122.98
Idaho	203.95
Montana	227.95
Nevada	122.98
New Mexico	137.98
Oregon	329.92
Utah	242.95
Washington	338.92
Wyoming	194.95
Total.....	\$2,999.35

+ 2,999.35

GRAND TOTAL CASH RECEIPTS..... \$6,000.00

DISBURSEMENTS:

8/29/72	Donald L. Kaldor, Reno, Nevada Western Directors' Meeting	\$47.80
8/19/72	G. Burton Wood, Chicago, Ill. ESCOP Interim Committee	28.15
9/26/72	Ray E. Ely, Chicago, Ill. ESCOP Interim Committee	187.69
10/11/72	G. Burton Wood, Berkeley, Calif. ESCOP Subcommittee re Exec. Dir. pos.	159.50
11/1/72	R. K. Frevert, Washington, D. C. Agr. Research Policy Advisory Comm.	347.00
2/23/73	Dale W. Bohmont, San Francisco & Washington, D. C. ESCOP Legislative Subcommittee	415.25
3/14/73	R. K. Frevert, Washington, D.C. Ag. Policy Adv. Comm.	351.80
4/17/73	John R. Myers, Washington, D. C. Planning meeting	626.90
5/7/73	G. Burton Wood, Atlanta, Ga. & Georgetown, S.C. (ESCOP)	443.17
5/8/73	Dale W. Bohmont, Georgetown, S.C. ESCOP	581.10
		<u>3,188.36</u>

GRAND TOTAL DISBURSEMENTS..... - 3,188.36

BALANCE JUNE 30, 1973..... \$ 2,811.64

FINANCIAL STATEMENT

Director-at-Large

Cash Balance, June 30, 1972 ..... \$3,966.07

ESCROW

FY 1968	2,456.24
FY 1969	2,150.00
FY 1970	2,362.50
FY 1971	2,482.50
FY 1972	2,482.50
Total	<u>\$11,933.74</u>

RECEIPTS:

Arizona	\$4,531.72	
California	8,899.65	
Colorado	6,169.70	
Hawaii	2,238.56	
Idaho	3,712.73	
Montana	4,149.53	
Nevada	2,238.56	
New Mexico	2,511.55	
Oregon	6,005.89	
Utah	4,422.52	
Washington	6,169.70	
Wyoming	3,548.93	
Total.....	\$54,599.04	<u>+54,599.04</u>

GRAND TOTAL CASH RECEIPTS..... \$58,565.11

8/15/72	Interest on Treasury Bond	\$160.00	
10/15/72	Interest on Treasury Bond	105.00	
5/15/73	Interest on Treasury Bond	<u>133.50</u>	
		\$398.50	<u>+398.50</u>

GRAND TOTAL INCOME..... \$58,963.61

DISBURSEMENTS:

9/29/72	Regents of California	\$15,000.00	
10/30/72	Regents of California	15,000.00	
12/7/72	Regents of California	15,000.00	
6/30/73	Regents of California	<u>9,200.00</u>	
TOTAL DISBURSEMENTS.....		\$54,200.00	<u>-54,200.00</u>

BALANCE JUNE 30, 1973..... \$4,763.61

ESCROW BALANCE..... \$11,933.74

TOTAL FUND..... \$16,697.35



JOB DESCRIPTION  
ADMINISTRATIVE ASSISTANT III  
OFFICE OF DIRECTOR-AT-LARGE  
WESTERN ASSOCIATION  
OF AGRICULTURAL EXPERIMENT STATION DIRECTORS

This is a position with varied duties in keeping with its purpose of assisting the DAL in the execution of his duties and responsibilities on behalf of the Directors of Agricultural Experiment Stations of the 12 western states. The Administrative Assistant with the aid of a Principal Typist-Clerk whom she supervises assists in the development, preparation and dissemination of informational and statistical reports; provides assistance to the DAL and Research Planning Associate in the implementation of the regional and national planning system; provides general assistance; and is Recording Secretary for the WAAESD. These duties require a high level of knowledge of and familiarity with the Agricultural Experiment Stations and their Directors, with USDA research agencies and their administrators and with the other agencies, publics and personalities with which the DAL deals. They require an ability to answer questions and make helpful suggestions when the DAL is in travel status (about one-half time).

More specifically, the assistant (and staff)

For Reports and Planning

- . helps with library research
- . tabulates data from responses to questionnaires and from secondary sources
- . checks for accuracy
- . assists in developing format for presentation
- . prepares and drafts charts
- . produces copy
- . supervises publications
- . keeps mailing list current
- . makes distribution

### Housekeeping and General Assistance

- . maintains meetings and appointment calendar; makes travel arrangements and reservations; provides support services for local meetings
- . organizes and maintains files
- . maintains budget records and prepares financial statements and budget reports
- . handles all purchases
- . maintains personnel records including dissemination of information regarding University policies and employee benefits
- . performs other duties as necessary

### JOB DESCRIPTION

#### RECORDING SECRETARY

#### WESTERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS

#### WESTERN DIRECTORS' MEETINGS

##### I. Preliminary

##### A. Information Gathering

1. Compile from office and personal records information regarding reports scheduled for meeting and reports due but not scheduled.
2. Contact chairmen of committees scheduled or due to report and follow-up on information.
3. Incorporate other developments occurring since last meeting determined to be of concern to WD and coordinate with inputs of others concerned.

4. Check with DAL to determine ramifications of national and regional developments; coordinate with those who are or should be concerned.
5. Contact Chairman of WD for any additional agenda items and information regarding invited guests.

B. Coordination of Gathered Information

1. Inform all of the elements of developments, as necessary.
2. Check with host institution regarding accommodations, meeting rooms, etc.
3. In consultation with Chairman of WD and host institution, match and confirm physical facilities details (including the scheduling and accommodation of social functions, financial arrangements, etc.)
4. Coordinate information regarding WD meeting with activities of FPC and Executive Committee.

C. Draft and reproduce a developed, tentative program and agenda and distribute copies to all persons on the DAL mailing list.

D. Prepare finalized program and agenda

1. Inputs to be coordinated and followed-up
  - a. Information from those receiving preliminary agenda
  - b. Additional information from DAL
  - c. Additional information from Chairman of WD
  - d. Additional information and finalized arrangements with host institution
2. On-going consultation with Chairman of WD regarding the final follow-up of any subsequent additions or changes to the agenda
3. Draft revised program and agenda, reproduce and distribute to determined mailing list.

## II. During WD Meetings

- A. Record actions and interpret deliberations, recording pertinent items.
- B. Consult with Chairman concerning agenda items that may not have been fully covered.
- C. Assist individuals with miscellaneous chores as necessary.
- D. Be available to assist FPC and Executive Committee as necessary, with the drafting, typing and reproduction of their reports.

## III. After WD Meetings

- A. Draft and type Minutes of Meeting. Reproduce and distribute to those present at meeting and interested others.
- B. Meeting follow-up
  - 1. Remind in writing (directly or through DAL) chairmen of committees or individuals of WD's charges to them at meeting, including any relevant back-up materials.
  - 2. Further follow-ups as necessary to ascertain status of charges.

## RRC MEETINGS

### I. Preliminary

- A. Maintain and develop all necessary information regarding projects to be evaluated.
  - 1. Collect data from Administrative Advisors of projects regarding evaluation.(annually)
  - 2. Determine from records which projects, coordinating committees and other reports will be subject to evaluation at a particular meeting.
  - 3. Compile a comprehensive report from this information, coordinating data with perceived needs of RRC.(annually)

4. Receive data from the Committee of Nine through CSRS regarding particular projects, etc. of concern to them and present to RRC.(annually)
  5. Determine man-power allotment among various federal and state agencies for the last fiscal year for which data is available. Prepare report and present to committee.(annually)
- B. Prepare and distribute agenda for all meetings.
  - C. Research, develop and compile into reports any information determined to be pertinent for review by committee. Inform committee by telephone or mail of any such developments or information.
  - D. Compile information from Administrative Advisors regarding reports, proposals and petitions. If determined to be necessary, inform committee.
  - E. As necessary assist Administrative Advisors with the reproduction and distribution of their reports.

## II. Additional Preparation for Spring Meeting of RRC

- A. Prepare Regional Trust Fund materials
  1. Distribute data regarding current status of regional funds to Administrative Advisors.
- B. Request data from Administrative Advisors regarding requests, in detail, for off-the-top funding.
- C. Obtain inputs from all other sources pertaining to projects requesting off-the-top funding.
- D. Compile into a report this information received from Administrative Advisors, including, in addition, comparative data regarding appropriations from previous fiscal year.
- E. Present report to committee, reproduce and distribute copies to members of RRC.

## III. During RRC Meetings

- A. Record the actions and interpret the deliberations, recording pertinent items.

- B. Consult with Chairman concerning agenda items that may not have been fully covered.

#### IV. After RRC Meetings

- A. Prepare draft of report of Meeting. Submit to committee members for approval.
- B. Prepare and type final report, incorporating revisions of committee, if any.
- C. Reproduce approved report and present to RRC Chairman for presentation and distribution at general sessions.

### FPC AND EXECUTIVE COMMITTEE MEETINGS

#### I. Preliminary

- A. Inform the Chairmen of FPC and Executive Committee of items that may require their attention.
- B. In consultation with Chairmen and DAL, follow-up on these items, including, as necessary, arranging for a special meeting prior to the general session. This may also include the coordination necessary to prepare and distribute a special agenda, as well as arranging for physical facilities, etc.

#### II. After FPC and Executive Committee Meetings

- A. Type and reproduce report of committee actions. Distribute copies to appropriate persons.

### OTHER DUTIES NOT DIRECTLY CONNECTED TO MEETINGS

- I. Update and distribute listing of WD Officers (including newly elected officers for following year) and Record of Service of Directors on regional and national committees. (annually following Summer Meetings)
- II. Collect data from all Directors, Administrative Advisors of regional projects, interregional projects, and coordinating committees, and also any relevant federal agencies regarding current status of each project within their purview. These data should include other projects (outside the western region) in which each state is participating. (annually, usually following fall meetings)

- III. Prepare and distribute an updated list of members of Western Association of Agricultural Experiment Station Directors. This is a complete mailing list including the four Regional Directors, CSRS, Directors Emeriti, and Deans and Vice Presidents of the Western Region. (annually)
- IV. Keep current files of all on-going projects -- the Recording Secretary should obtain a copy of all regional research projects that are signed by the Administrative Advisor, Committee of Nine, and CSRS -- including annual reports. Files also are kept of task force reports, coordinating committees, as well as other files pertaining to the Western Association of Agricultural Experiment Station Directors. (These files are the Association's official records.)
- V. Prepare and develop a progress report of all task forces established in the Western Region. This report should contain information concerning recommendations of the task forces, actions taken as a result of the recommendations, and the final outcome of the actions taken. This report is to be updated and distributed annually.
- VI. Draft, type, reproduce and distribute to CSRS with copies to all members of the Western Association of Agricultural Experiment Station Directors the Annual Report of W-106. (Due February 1 of each year.)
- VII. Review Minutes and maintain a list and distribute a digest of all policy decisions contained in Minutes; this record is to be kept up to date.

## APPENDIX

## 10.0 REGIONAL RESEARCH COMMITTEE REPORT

Western Association  
of Agricultural Experiment Station Directors

Dunes Motel  
Newport, Oregon

August 13-14, 1973

## 10.1 Project Reviews

## 10.11 W-109 Codling Moth Population Management in the Orchard Ecosystem

The annual report of W-109 was received from Administrative Advisor B. E. Day of California. RRC reviewed this project and found that it is progressing satisfactorily.

## 10.12 W-115 Western Region Area Development Research Center

This project was reviewed at the Spring 1973 meeting and is progressing well. Administrative Advisor G. B. Wood of Oregon appeared before RRC to discuss this report. RRC recommends that the Administrative Advisor make a recommendation to RRC by the Spring 1974 meeting in line with Title V of the Rural Development Act of 1972.

RRC recommends that this project be extended until June 30, 1975.

(Action of Western Directors: Passed)

## 10.13 W-120 Economic and Social Impact of Adjustment in Use of Chemicals in Agriculture. D. W. Bohmont, Administrative Advisor

The annual report of this project has not been received.

## 10.14 WM-62 Technological and Structural Changes in the Marketing of Beef



The annual report of WM-62 was received from Administrative Advisor C. P. Wilson of Hawaii. Director Wilson appeared before RRC to discuss this project.

RRC recommends that this project terminate as scheduled on June 30, 1975. RRC recognizes that this is an important area of research and suggests that the technical committee consider drafting a new project outline.

10.15 IR-1 Introduction, Preservation, Classification, Distribution, and Preliminary Evaluation of Wild and Cultivated Species of Solanum

The 1972-73 Report to the IR-1 Technical Committee, a summary of the project and a revised project outline were received from Administrative Advisor W. H. Foote of Oregon. Director Foote reviewed the activities of the project and highlighted the contributions of this project to the potato breeding programs.

RRC recommends approval of the IR-1 revision to be effective July 1, 1974 through June 30, 1979. RRC recommends that Director W. H. Foote of Oregon continue as Administrative Advisor and Mr. Walter Sparks, University of Idaho, Aberdeen continue as representative to the Technical Committee.

(Action of Western Directors: Passed)

10.16 WRCC-12 Management of the Biological Balance of Soil to Achieve Root Health for Efficient Crop Production

The annual report of WRCC-12 was received from Director J. B. Kendrick, Jr. of California. This coordinating committee is progressing satisfactorily.

10.2 Project Proposals

10.21 Assessment of Social Competence in Children of Selected Rural Populations in the Western Region

A proposal to develop a project outline bearing the above title was received from Director P. J. Leyendecker of New Mexico. He had received a letter from Dr. Elizabeth Gifford of Colorado expressing her support of this project.

RRC recommends the establishment of an ad hoc technical committee to develop a project outline in this area to be effective July 1, 1974 with Director J. P. Jordan of Colorado as Administrative Advisor.

(Action of Western Directors: Passed)

## 10.22 Marketing Research

On behalf of Western Directors, Director P. J. Leyendecker requested WAERC to make recommendations concerning regional marketing research projects. WAERC responded with recommendations on four areas of research.

### 10.221 Impacts of International Trade on Western Agriculture

RRC recommends the establishment of an ad hoc technical committee to develop a project outline in this area to be effective July 1, 1974 with Director D. D. Johnson of Colorado as Administrative Advisor.

(Action of Western Directors: Passed)

### 10.222 Price Determination and Reporting in Forward-Contracted Commodities

RRC recommends that an ad hoc technical committee be established to develop a project outline in this area to be effective July 1, 1974 with Director D. L. Oldenstadt of Washington as Administrative Advisor.

(Action of Western Directors: Passed)

### 10.223 The Effects of Adjustments in Energy Use on Production and Marketing in Agriculture

RRC recommends that an ad hoc technical committee be established to develop a project outline in this area to be effective July 1, 1974 with Director A. F. McCalla as Administrative Advisor.

(Action of Western Directors: Passed)

10.224 Economic Analysis of Collective Bargaining  
for Agricultural Products

RRC recommends that consideration be given to incorporation into the "Price Determination and Reporting in Forward-Contracted Commodities" project.

(Action of Western Directors: Passed)

10.23 Turkey Breeding Research

A request for the development of a regional research project on "Improvement of Reproductive Efficiency in Turkeys" was received from Director R. E. Moreng of Colorado.

RRC recommends the establishment of an ad hoc technical committee to develop a project outline in this area with Director Moreng as Administrative Advisor. This project is to be activated July 1, 1974.

(Action of Western Directors: Passed)

10.3 Revisions and Extensions

10.31 W-6 Introduction, Multiplication, Maintenance and  
Evaluation of Plant Germ Plasm

A request for the revision of W-6 was received from Director M. L. Wilson of New Mexico.

RRC recommends approval of the W-6 revision effective July 1, 1974 through June 30, 1979 and requests Director M. L. Wilson to continue as Administrative Advisor.

(Action of Western Directors: Passed)

10.32 W-113 Improvement of Employment Opportunities and  
Earnings for Disadvantaged People in Non-Metropolitan  
Areas.

At the Spring 1973 meeting, RRC requested the technical committee to make recommendations concerning the future of project W-113. A request for the revision of W-113 was received from Director G. B. Wood of Oregon.

RRC recommends that the present technical committee proceed to prepare a revision of W-113 or to draft a new project outline in the area of "Evaluation of Alternative Intervention Strategies by the Public Sector (in Rural Development) to Improve Employment Opportunities for Disadvantaged People" to be effective July 1, 1974. RRC recommends that Director G. B. Wood continue as Administrative Advisor.

(Action of Western Directors: Passed)

10.33 W-114 Institutional Structures for Improving Rural Community Services

A request for a two-year extension of W-114 was received from Director G. B. Wood of Oregon.

RRC recommends the approval of a two-year extension of W-114.

(Action of Western Directors: Passed)

10.34 W-108 Response of Plants and Plant Communities to Sustained Use of Herbicides

A request from the Chairman of the Technical Committee for the extension of W-108 was received from Director B. E. Day of California.

RRC requests that the Administrative Advisor make a reassessment of this project and report back to RRC at the Spring 1974 meeting at which time a recommendation will be made to the Western Directors.

10.35 W-121 Clean West: A Systematic Analysis of the Economic and Social Implications of Environmental Problems

In response to RRC's request, the proposed revision of W-121 was received from Director A. F. McCalla of California.

RRC recommends approval of the revision of W-121 to be effective January 1, 1974 through June 30, 1979 and asks that Director A. F. McCalla continue as Administrative Advisor.

(Action of Western Directors: Passed)

## 10.36 WRCC-8 Range Livestock Nutrition

A request for the extension of WRCC-8 was received from Director N. W. Hilston of Wyoming.

RRC recommends the extension of WRCC-8 until June 30, 1977 with Director N. W. Hilston as Administrative Advisor.

(Action of Western Directors: Passed)

## 10.4 WRCC Petitions

## 10.41 Determinants of Choice in Outdoor Recreation

A request for the establishment of a WRCC in this area was received from Director L. C. Ayres of Wyoming.

RRC favors the establishment of a project in this area providing sufficient interest can be identified. RRC recommends that Director Ayres be authorized to reconvene an ad hoc technical committee and submit a revised project outline to the Committee of Nine.

(Action of Western Directors: Passed)

## 10.42 Control of Fruiting

A request for the establishment of a WRCC in this area was received from Director D. D. Johnson of Colorado.

RRC recommends the establishment of WRCC-17 Control of Fruiting to be effective July 1, 1974 through June 30, 1976 with Director D. D. Johnson as Administrative Advisor.

(Action of Western Directors: Passed)

## 10.43 Northwest Alfalfa Pollination

A request for the establishment of a WRCC in this area was received from Director J. M. Nielson of Washington.

RRC recommends the establishment of WRCC-18 Northwest Alfalfa Pollination to be effective July 1, 1973 through June 30, 1976 with Director J. M. Nielson as Administrative Advisor.

(Action of Western Directors: Passed, with a new title to be subject specific.)

## 10.5 Personnel Reassignments

	<u>Project</u>	<u>Adm. Advisor</u>
W-45	Residues of Selected Pesticides-- Their Nature, Distribution, and Persistence in Plants, Animals and the Physical Environment	L. C. Ayres
W-102	Biological Methods of Control for Internal Parasites of Livestock	A. M. Mullins
W-108	Response of Plants and Plant Communities to Sustained Use of Herbicides	R. J. Miller
W-109	Codling Moth Population Manage- ment in the Orchard Ecosystem	J. S. Robins
W-112	Reproductive Performance in Cattle and Sheep	M. J. Burris

RRC recommends that the above personnel assignments be approved.

(Action of Western Directors: Passed)

## 10.6 Other

### 10.61 Format for Review of Projects

RRC developed a format for response by Administrative Advisors pertaining to the annual review of regional research projects.

RRC recommends that this format be considered by Western Directors and asks that reactions and recommendations be forwarded to RRC prior to the November meeting of Western Directors.

ADMINISTRATIVE ADVISOR PROGRESS REPORT  
WESTERN REGIONAL RESEARCH PROJECT

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

TERMINATION DATE

COVERING THE PERIOD  
TO

**PARTICIPATION:**

SAES	SMY ASSIGNED*	USDA AGENCY	SMY ASSIGNED*	OTHER AGENCY	SMY ASSIGNED*
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In your opinion, does the present allocation of manpower resources indicated above constitute a sufficient input to accomplish the objectives of the project within the proposed time frame?      Yes      No\*\*

Are the current research activities consistent with the objectives of the project outline?      Yes      No      If no, explain

Is the project truly regional in scope and activity? Regional Not  
Regional If not regional, explain

Does the research project duplicate other research efforts currently active within the region but supported by other funds and agencies? Yes\*\* No

Is the work having, or will it have, a significant regional impact? Yes

Is a regional publication one of the procedural goals of the technical committee?

Do you favor continuation of the regional project in its present form? Yes

Will a request be made to extend the time period?      Yes\*\*      No

Will a request be made to revise the project?	Yes**	No
1	1	1
2	1	1
3	1	1
4	1	1
5	1	1
6	1	1
7	1	1
8	1	1
9	1	1
10	1	1
11	1	1
12	1	1
13	1	1
14	1	1
15	1	1
16	1	1
17	1	1
18	1	1
19	1	1
20	1	1
21	1	1
22	1	1
23	1	1
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86	1	1
87	1	1
88	1	1
89	1	1
90	1	1
91	1	1
92	1	1
93	1	1
94	1	1
95	1	1
96	1	1
97	1	1
98	1	1
99	1	1
100	1	1

If there has been superior performance (or lack thereof) by members of the technical committee, you are urged to communicate directly with the director(s) involved.

\* Obtain estimate from project leaders as part of annual report.

\*\* Attach comments or use reverse. Requests for extension or revision should be forwarded to the Chairman of RRC in the time frame and format recommended in the Manual of Procedures.

(Action of Western Directors: Passed)

- 10.62 Means by which to obtain information regarding inputs from all sources with respect to projects requesting off-the-top funding

RRC requests that Administrative Advisors requesting off-the-top funding for regional research projects provide RRC with information regarding all funding sources at the time the projects are considered.

(Action of Western Directors: Passed)

- 10.63 Financing Regional Research Publications

A procedure for financing regional research publications is in the Western Directors' Minutes of Fall 1964. It is the responsibility of the administrative advisor to determine in advance of publication the financial commitment of each participating state.

- 10.64 Off-The-Top Funding for W-6

A copy of a letter from Director M. L. Wilson to Dr. B. F. Beacher was received indicating the funding of W-6 for fiscal year 1974 as follows:

Hawaii	\$ 6,000
Oregon	500
Washington	<u>69,559</u>
	\$76,059

- 10.65 An Economic Analysis of Present and Potential Trade Between Alaska and Washington

A project proposal bearing the above title was submitted to the Committee of Nine for consideration and brought to the attention of RRC. The project outline was referred back to the Administrative Advisor, Director H. F. Drury of Alaska, for revision.

RRC reviewed this project proposal. It was noted that the project proposal bears a W- number though the proposed Administrative Advisor is located in the North Central region. Also, the project seems qualified for designation as a marketing project but does not bear a "M" number.



RRC considers the area of work proposed appropriate for the development of an acceptable regional research project and recommends that the regional project be identified in the same region as the administrative advisor.

(Action of Western Directors: Passed)

#### 10.7 Support of Regional Research Projects

RRC encourages the Western Directors to respond to Dr. B. F. Beacher's memorandum of July 2, 1973 regarding your support to projects proposed for fiscal year 1974.

#### 10.8 Actions taken under preceeding sections of this report

<u>Ad Hoc Technical Committees</u>	<u>Adm. Advisors</u>	<u>Effective Dates</u>
W- Assessment of Social Competence in Children of Selected Rural Populations in the Western Region	J. P. Jordan	July 1, 1974
W- Impacts of International Trade on Western Agriculture	D. D. Johnson	July 1, 1974
W- Price Determination and Reporting in Forward-Contracted Commodities	D. L. Oldenstadt	July 1, 1974
W- The Effects of Adjustments in Energy Use on Production and Marketing in Agriculture	A. F. McCalla	July 1, 1974
W- Improvement of Reproductive Efficiency in Turkeys	R. E. Moreng	July 1, 1974
<u>Western Regional Coordinating Committees</u>	<u>Adm. Advisors</u>	<u>Effective Dates</u>
WRCC-17 Control of Fruiting	D. D. Johnson	July 1, 1974 to June 30, 1976
WRCC-18 Northwest Alfalfa Pollination	J. M. Nielson	July 1, 1973 to June 30, 1976

## APPENDIX

## 24.0 REVIEW AND CRITIQUE:

## AGRICULTURAL AND WATER POLICIES AND THE ENVIRONMENT

Prepared for

Western Agricultural Experiment  
Station Directors

By

Ad hoc Subcommittee of

The Western Agricultural Economics Research Council's  
Committee on the Economics of Natural Resource Development

Walter R. Butcher, Washington State University, Subcommittee Chairman  
Jay C. Andersen, Utah State University  
Robert Hagan, University of California, Davis  
Warren Johnston, University of California, Davis  
Charles Moore, Economic Research Service, USDA, Davis, California

## Introduction

### What is the "Heady report?"

This subcommittee has been asked to provide the Western Directors with a review and critique of the so-called "Heady report." The report in question was the result of a study made for the National Water Commission by Iowa State University's Center for Agricultural and Resources Development. There are two similar reports of this work. One was published for the Commission by NTIS as Alternative Demands for Water and Land for Agricultural Purposes.<sup>1</sup> The other was published by Iowa State University under the title Agricultural and Water Policies and the Environment.<sup>2</sup> Substantial material from the report was also incorporated into the National Water Commissions' own report to the President and Congress.

The "Heady report" has received a good deal of attention and comment since its release. Much of the comment has centered around the report's pessimistic conclusions about the lack of prospects and justification for irrigation in the Western United States. The authors of the report conclude that there is no need for new irrigation and, indeed, some existing irrigation might well be phased out in the interests of most

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<sup>1</sup>E. O. Heady, H. C. Madsen, K. J. Nicol and S. H. Hargrove, Agricultural and Water Policies and the Environment: An Analysis of National Alternatives in Natural Resource Use, Food Supply Capacity and Environmental Quality, CARD Report 40T, Iowa State University, June 1972.

<sup>2</sup>E. O. Heady, H. C. Madsen, K. J. Nicol and S. H. Hargrove, Agricultural Water Demands, Future Water and Land Use: Effects of Selected Public Agricultural and Irrigation Policies on Water Demand and Land Use, CARD, Iowa State University, November 1971.

efficient food production and provision of water for municipal and industrial uses in arid areas. Irrigators and related interests are alarmed, especially when they see these conclusions cited as the reason behind the National Water Commission's recommendations for an end to special subsidized status to federal irrigation projects.

### Brief Review of the Study

#### The Model

The conclusions of the "Heady report" are based upon the results of a "model study." The large linear programming model that is used in the study is related to several models of similar nature that have been developed at Iowa State University during the past 15 years.<sup>3</sup> Several past models have focused on agricultural programs in general and land retirement in particular. This model focuses on location of production with particular reference to irrigated agriculture.

The model is "normative" rather than "predictive". It is designed to determine what the pattern of agricultural production should be.

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<sup>3</sup>For example see:

- a) R. R. Brokken, "Interregional Competition in Livestock and Crop Production in the United States: An Application of Spatial Linear Programming," Volumes I Through IV. Unpublished Ph.D. dissertation, Iowa State University of Science and Technology, 1965.
- b) R. H. Eyvindson, "A Model of Interregional Competition in Agriculture Incorporating Consuming Regions, Producing Areas, Farm Size Groups and Land Classes." Volume I through V. Unpublished Ph.D. dissertation, Iowa State University of Science and Technology, 1965.
- c) \_\_\_\_\_ and L. V. Mayer, Food Needs and United States Agriculture in 1980, National Advisory Commission on Food and Feber, Washington, D.E., Technical Papers Volume 1, August 1967.
- d) \_\_\_\_\_ and S. H. Hargrove, Food Costs, Farm Incomes and Crop Yields: With Restrictions on Fertilizer Use, Center for Agricultural and Economic Development, Iowa State University of Science and Technology, CAED Report No. 38, March 1971.

It seeks an "optimum" among the geographic regions with optimal defined as the pattern of crop and livestock production that will meet food demands in the year 2000 at minimum cost to the nation.

Each of the 223 producing regions in the model has a limited number of dry land and irrigated cropping alternatives. Each production alternative in each region has a cost attached which includes costs of labor, capital, purchased inputs and water user charges. Transportation costs are included for products that must be shipped from producing to consuming regions. The available land within each region may be allocated to any of the alternative crops or it may be left idle if national food demands can all be met through lower cost production activities in other regions. Since all costs are considered to be variable there are no changeover costs for major shifts in production or for stranded resources when areas go out of production.

Certain features were incorporated in the model especially for the National Water Commission study. Water supplies and water demands were estimated for each region and a balance constraint introduced in the model to require that demands not exceed supplies. Municipal and industrial water uses were given first priority among demands for regional water supplies. In two variations of the model ("alternative futures") modifications were introduced to portray (1) removing "fragile lands" from production and (2) eliminating use of certain chemicals in corn and cotton production.

### The Results

The results of the model as they pertain to agricultural production generally and western agriculture particularly are summarized in Table 1 of

Table 1. Abbreviated summary of land use, 1964 and under alternative model results for 2000.

	Dry land		Irrigated land		Unused cropland
	Annual crops	Tame hay and silages	Annual crops	Tame hay and silages	
(Million acres)					
1964	176.4	52.7	13.3	7.5	55.5
Model A	189.5	99.1	6.1	10.9	16.4
Model A1	188.5	104.7	6.4	7.3	15.1
Model A2	190.1	109.4	5.1	4.5	12.9
Model A3	187.7	115.5	4.1	2.3	12.5
Model B	177.3	77.8	6.1	9.8	51.0
Model C	188.0	70.2	8.9	10.1	44.9
Model D	219.2	80.2	8.1	10.1	4.5
Model E	179.6	78.0	6.5	9.9	48.1
Model F	170.5	96.1	6.5	10.3	20.1

Model A --Free market, 300 million population, present water prices

Model A1--Free market, 300 million population, \$15.00 water price

Model A2--Free market, 300 million population, \$22.50 water price

Model A3--Free market, 300 million population, \$30.00 water price

Model B --Free market, 280 million population, present water price

Model C --45 million acre land retirement, 280 million population, present water price

Model D --Free market, 325 million population, high exports, advanced technology in 2000

Model E --Free market, 280 million population, insecticide limitations

Model F --Free market, 280 million population, fragile lands removed

of this report. More detail may be seen in Tables 4.68 to 4.71 of the "Heady report" that are included as Appendix A to this report.

### Conclusions of the Report

The results of the various runs on the model led to a number of conclusions. The most significant of these are the following:

1. Land will not be scarce by 2000. Output from U.S. farm and range lands, including lands now set aside in government programs, will be adequate to meet projected food demands even at the high level that would be expected if population increases to 325 million persons and some food exports grow to about twice their 1967-1969 levels.
2. Expansion of irrigation is not needed to meet future food needs. Quite to the contrary. The most efficient pattern of production at most projected demand levels would be achieved with a reduction in the acreage of irrigated land used for annual crops.
3. There will be no general shortage of water by the year 2000. Increased municipal and industrial demands can be met easily (except for isolated localities) since (a) municipal and industrial uses are very small relative to irrigation uses, (b) irrigation need not, in fact should not, be expanded, and (c) if a tight situation does arise, irrigation can be contracted to release the water needed for municipal and industrial at no increase in difficulty or cost of food production.

### Policy Recommendations of the Report

1. The general agricultural policy need, at least up until 2000, will be for continued supply control rather than for capacity expansion.

2. There is no need for a program of expanded irrigation capacity. Future food needs can be met more efficiently by returning idled lands to production.
3. Future water needs should be met where necessary by reducing irrigation and the preferred policy for achieving the shift is a higher price for water used by irrigators.
4. Public investment in irrigation should be discontinued since it counteracts supply control policies by expanding production capacity unnecessarily.
5. Private irrigation development ought to be curtailed through correcting the inconsistent general farm policies that now work to encourage investment in production capacity--not only by irrigation but also by other output expanding measures such as land clearing, drainage, flood control, etc..

#### Critique of the Assumptions and Analysis

We will turn attention in our critique of the report first to the assumptions and analysis and then to the recommendations and some of their implications. The critique of assumptions and analysis will be organized around the elements that lead to the major conclusions.

1. Food production capability: The report's conclusion that there should not be any strain on U.S. food producing capacity in the year 2000 is an important finding that plays a key role in other conclusions and policy recommendations. The critical elements in the analysis that lead to this conclusion are: (a) projected domestic food demands, (b) exports, (c) projected crop yields and livestock feed conversion rates, (d) relative productivity of lands brought into production from current idle status or converted from one crop to another, and (e) extent of environmental controls or restraints on agriculture.



- a. Domestic demands. Three alternative projections of U.S. population in the year 2000 were utilized in the study. The projections of 280, 300, and 325 million span what is generally felt to be the most likely range of population projections. The projected per capita rates of food consumption are fairly close to current levels except for beef consumption that is projected to increase by 40 percent and milk and egg consumption that is projected to be lower than current levels. The high beef demands are above other projections. They have an important effect on land use.
- b. Export. Exports were set at their 1967-1969 level for all runs of the model except one (Model D) where they were set at approximately twice the 1967-1969 level. In 1972, agricultural exports of grain and oilseed products were already far above the 1967-1969 level. If this recent experience indicates a new tendency toward higher export levels the models that utilize 1967-69 export levels would be understating food demands for the year 2000.
- c. Projected technology. The study estimates crop yields and feed conversion rates for the year 2000 by projecting past trends. For crops, a trend of 50 years in state average yields is used to make the projections. This is not an unreasonable estimating technique, but some consideration might be given to the possibility that yield trends may taper off at some time in the future--perhaps before the projected year-2000 yields are reached.

- d. Land Productivity. The model defines cropland within a producing area as the cropland harvested in 1964 plus land retired under government programs. All of this land is available for any of the crops produced within that area. This is an optimistic assumption. It accords an average level of productivity to retired lands whereas there is general feeling that the lands that have been retired are those with lower yield potential. The models also assume complete substitutability of land for the various crops within a producing area. In practice, greater specialization in a major crop may lead to decreasing average yields as less suited land is brought into its production.
- e. Environmental controls. Environmental controls are imposed in only two models, Model E and Model F. The constraints-- pesticide limitations and retirement of fragile land-- are imposed in separate models with the low-level demand assumption in force (280 million population and 1967-1969 level exports) in each case. If both constraints were imposed in the same model the results might indicate a tighter supply/demand balance.

In general the assumptions that are important background for the conclusion of more-than-adequate food production capacity are not unreasonably optimistic. On the other hand, it is not unreasonable to assume that less favorable conditions might occur. If so, the narrowed margin for error in projected surplus capacity could be greatly reduced. Even a different combination of the study's own assumptions (high level exports, 320 million population, and projected technology) would be more than sufficient to lead

to a need for expanded capacity to meet all food demands. Model D, which assumed only that demands would be at a "high" level, showed only 4.25 million acres of surplus capacity (about 1 percent of cropland). A few minor and not too improbable changes could easily wipe out that narrow margin.

2. Future prospects for irrigation: Secondly we directed our critique to aspects of the study that bear particularly upon the question of future prospects for irrigated agriculture. The results of the study indicate that the least cost pattern of food production for the year 2000 would include (a) a considerably reduced acreage of irrigated land used for production of annual crops (around 6 million acres vs. 13.3 million acres in 1964) but, (b) an increased acreage of dryland used for annual crops. The released irrigated cropland would be partly converted to hay and pasture production, partly returned to nonirrigated crop production and partly idled. The increased dryland crop acreage would be obtained by bringing back into production lands now idled under various government supply control programs.

Relative costs of production on dryland and irrigated land are the determining factors leading to the model's choice of "retiring" irrigated lands and bringing currently idled drylands into production to balance production with year 2000 food demands. The model has the objective of meeting food demands at minimum total national cost. It will seek out the set of activities having lowest cost. The fact that some irrigated activities were omitted implies that there are enough lower-cost dryland production activities to meet expected food demands. Specific costs are not

included in the report,<sup>4</sup> although we know that the estimated costs must have been higher for irrigated crops than for most dryland crops. It is not possible to check out the study's cost estimates since there was not sufficient time to obtain and review the basic material. Furthermore, it is difficult to find other independent studies that compare costs of irrigated and dryland production. A series of U. S. Department of Agriculture studies of variable costs of producing grains and cotton<sup>5</sup> does show generally higher costs in irrigated areas. This finding tends to support the findings of the Heady report.

A fact that appears to contradict a conclusion that irrigated agriculture is relatively inefficient is the substantial investment in new private irrigation development that has been occurring during the past 20 years. This investment is presumably being made in the expectation of a profitable return which implies that costs are below product prices. However, the existence of government programs, clouds the meaning of this observation. It is possible that western irrigated agriculture (and Midwestern and Southern land reclamation) is enjoying high prices that are the fruit of government price support programs while established areas bear the brunt of the land retirement features of the programs. "Creating new cropland through irrigation drainage or land clearing may be profitable even though costs of production are greater than on the land being retired from production. Thus, the land development boom does not "prove" that costs are lower on the newly developed lands.

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<sup>4</sup>Eyvindson, Roger H. "A Model of Interregional Competition in Agriculture Incorporating Consuming Regions, Producing Areas, Farm Size Groups and Land Classes," Volumes I through V. Unpublished Ph.D. dissertation. Iowa State University of Science and Technology, 1965.

<sup>5</sup>U. S. Department of Agriculture, Economic Research Service, "Selected U.S. Crop Budgets, Yields, Inputs, and Variable Costs," Vols. I-VI, 1971.

Other aspects of the study's cost assumptions may be questioned. For one, the interactions among crop enterprises and between crops and livestock are not represented except insofar as livestock require that feed crops be produced. For western irrigated agriculture, this may be an important omission, since the grains and forage crops that were the subject of the study are often grown in conjunction with higher valued fruit, vegetables, and specialty crops. Grains and forages can sometimes be "fitted in" to utilize off peak labor, water, and machinery and land that needs to be rotated. If so, the real marginal costs of production attributable to the grain and forage may be much lower than the apparent costs. The model's assumption that each crop stands alone and bears its full costs may thus be overestimating costs of production in irrigated areas.

The assumption that retired lands would come into production with yields and costs equal to the average of the producing region may tend to underestimate the costs for expansions of production on drylands. It would seem logical that farmers would retire land that was either low yielding or expensive to operate. If either is the case, costs per unit of product would be higher than average for these lands, if brought back into production.

Finally, on one count, at least, the study would seem to be underestimating costs on irrigated lands. The basic water costs used are the average charges on Bureau of Reclamation projects within each of the producing regions. These charges are certainly less than the full costs on the project and likely less than the amount actually paid out on the 80 percent of irrigated land that is in private development.

3. Water Supplies: A third major area that the study considered was the balance between water supply and water demand. The conclusion from the study was that water shortages are not likely to be a general problem. Furthermore, where specific local shortages do arise a reduction in the amount of irrigation can readily provide the municipal and industrial water needs.

The model results regarding adequacy of water supplies depend upon the earlier conclusions that there will be adequate food production capability to the year 2000 and that irrigated production is relatively inefficient. If those conclusions are true, there is no need to divert more water for irrigation. Quite the contrary, the models indicate that the "optimal" food production pattern would include a reduction in irrigation. If irrigation water use is reduced as part of an efficient food production program, the problem of balancing water supply and demand is mostly solved without any need to press issues regarding how water should be allocated among competing uses.

If there was a "need" for crop production on irrigated lands, the results might be quite different. However, since that was not the case for any of the models used in this study, there is no clear indication of what the water supply/demand situation might be if irrigated acreage were held constant or increased.

It should be pointed out that the water supply and use portion of the model is a very simplified representation of river basin hydrology. Assumptions about return flow and potential reuse of once-diverted waters are quite simplified. Also, there is no representation of the potential for reducing water use per unit of crop produced by using labor and capital to reduce losses due to evaporation runoff and deep percolation. Although water use per unit of crop does not figure importantly in the major conclu-

sions, it could become important, if pressure on agricultural production capacity were greater.

### Critique of the Study's Policy Implications

The report's section on policy implications contains the author's conclusions about policy directions that should be taken, in view of the findings of the study. The major points in this section depend not only upon the conclusions of the study but also upon additional assumptions, value judgments and assertions. We will discuss here some of the main questions involved.

1. The general agricultural policy need will be for continued supply control rather than for capacity expansion.

The models do indicate expected surplus capacity. However, in some of the models the margin is not large. Model D (325 million population, exports at about 1972 levels and no environmental constraints) idle land was indicated at only 45 million acres or about 1% of cropland.

It may be desirable to have a wider margin of safety against shortages that could result from short-run or unpredictable increases in demand or reductions in output--as in the 1972-73 crop year. Expanding capacity beyond expected long run needs is one way of providing this margin. Although this would not provide minimum long run costs it would lessen the chance of unforeseen shortages.

2. There is no need for a program of expanding irrigation capacity

The models used in the study indicate that future food needs can be met most cheaply through production on dryland. It follows then, that if least cost production is the paramount objective, expansion of irrigated acreage would be an inefficient, if not counter-productive, policy. But, if either the conclusion of surplus productive capacity or the conclusion that irrigated production is more expensive are proven wrong, irrigation expansion could become quite desirable. Either of these eventualities is possible.

The study relied exclusively on efficiency, the criteria for deciding whether irrigation should be expanded. The study did not investigate the question of whether or not a program to expand irrigation could be justified on other grounds even though minimum cost was not attained. Goals such as regional development and provision of employment or farming opportunities have certainly figured in the justification of past irrigation developments. But, serious questions have been raised about the efficacy and desirability of using irrigation projects to achieve these other purposes. One could say, at most, that nonefficiency objectives may be a consideration in some cases.



3. Future water needs should be met by reducing irrigation use through a policy of higher prices for water with compensation to farmers and areas bearing the reduction.

The conclusion that food needs can be met readily with present or even considerably smaller irrigated areas sets the stage for this policy recommendation. A proposal to reduce irrigated area touches a very sensitive policy issue. A reduction would entail problems of salvaging fixed assets and relocating farm operators, workers and farm-related businesses. Thus the apparent cost savings from cutting back on irrigation may not all be realized until after a rather long readjustment period. There also would be purely social costs involved. It is partly out of recognition for these problems that municipalities have sought whenever possible, to avoid getting their water supplies by reducing supplies to irrigators.

On the other hand, the alternative of protecting water supplies to irrigated agriculture also implies adjustments. Other water users would eventually have to adjust to smaller water supplies. Storage projects and inter-basin transfers impose environmental costs. And agricultural adjustments in other areas to hold down surpluses can also involve personal and community costs. Selected roll backs in irrigated acreage may be the lesser evil among the adjustment alternatives open to the nation and the water supply areas. But every effort should be made to find an equitable and expeditious way of making the water transfers. The compensation policies suggested in the report are not entirely clear.

4. Public investment in irrigation should be discontinued.

This is a logical implication of the conclusion that surplus agricultural capacity will continue for the foreseeable future.

As the authors correctly argue, publicly subsidized development is inappropriate and doubly expensive in a situation where supply control is required. In addition, as the authors also point out, the same principle applies to other types of publicly subsidized investments to increase output. Among these are flood control and drainage projects and a host of other land clearing and fertility improvement programs. Unfortunately, these programs are not singled out for the same degree of attention as is focused on irrigation.

One might also argue for discontinuation of public investment in irrigation if generally high food prices could be expected, since private returns to irrigators would then presumably be sufficient for them to completely finance their own developments. Interestingly enough these high prices would arise if food demands pressed tightly against supplies. This is exactly opposite to the situation projected in the study and used there as a base for the argument against subsidized irrigation development. Thus, an argument could be raised against specific subsidies to irrigation development, whether food supplies are expected to be tight or abundant.

5. The generally inconsistent policies that encourage private investment in agriculture ought to be corrected.

A convincing case is made in the report for general revision of agricultural policies to remove incentives for excessive investment in capacity expansion. This is certainly needed if the general surplus situation continues into the future. The change would presumably take the form of lower prices for farm products and discontinuation of the acreage allotment control device.

It is important to note that a change of this sort would be needed to dampen the private development that is providing most new irrigation. At the same time, a general policy change of this sort would tend to also slow other land development booms--such as in Mississippi River bottomlands--and generally cut back expenditures for improvements on all lands. The results of such a general policy change would likely include a general slackening in the upward trend of yields on both irrigated and dry lands and a closer-than-expected match between food supply and demand. Thus the indicated need for continuing to use existing irrigated lands would likely increase.

#### Conclusions About the Report

The "Heady Report" paints a bleak picture for the future of Western irrigated agricultural development. If its conclusions are correct and the suggested policy changes are implemented we could expect to see:

(1) an end to the Bureau of Reclamation's program of irrigation project construction and low interest loans to small projects, (2) disappearance of the profit margin for private irrigation development, (3) some decline in acreage on existing projects due to rising water prices and reduced profit for producers and (4) declining employment in Western agriculture and agribusiness. Whether these will all happen or not depends upon the

correctness of the analysis and the prospects for actual implementation of the suggested policy changes.

Our review of the report did not reveal the kind of obvious major errors that would clearly invalidate the conclusions. There are some weaknesses that introduce possibilities for a reversal in the conclusions. The projections are a major area of uncertainty. Consumption patterns, exports, agricultural technology or costs could all turn out to differ from the projected levels by enough to change a projected land surplus into a deficit. If that should happen to occur, the results would be quite different. Prices would rise, production-expanding investments would become profitable and irrigation would likely increase rather than decline. The study shows that this is not the most likely outcome, but it cannot insure that it will not happen.

Even if the analysis and conclusions found in the report prove to be correct, it is possible that the suggested policies will not be implemented. The major changes--end agricultural subsidies, revise support programs to end inconsistencies, and increase water prices--are all likely to meet with substantial resistance. Objectives other than just minimizing the cost of food supply are likely to be propounded and to receive support in some policy making quarters. If the policy changes are not enacted, the study's projection of surplus capacity to the year 2000 would mean simply that present conditions would continue. Thus, Western states might well expect to also see a continuation of recent past trends of fairly rapid growth in irrigation development. Since most current development is private, rather than directly subsidized, the most critical policy for overall irrigation development is the price and production control policy rather than the subsidized development program.

The study's findings regarding water supply must be termed tentative. The "water portion" of the model is highly simplified. A more detailed model would certainly be needed to provide definite answers to basic questions about balancing all water uses within available supplies. The suggested policy of obtaining water for municipalities and industries by increasing the price to irrigators is appealing on grounds of economic efficiency and simplicity of operation. But, many questions remain to be answered regarding easing the adjustment process and providing equitable compensation to affected parties.

Some implications for agricultural research in Western states can be drawn from the report. There is a clear indication of need for more knowledge about relative costs of production on irrigated lands in comparison to drylands. Better cost and yield data would help to either confirm or refute the study's conclusion that costs are higher on irrigated lands. An improved study of water use and allocation in the region would also help to clear up some questions left by the study. The finding of relatively high costs for irrigated production suggests that research on means of reducing costs would be most helpful to the long-run health of irrigated agriculture. In fact, the study results suggest that cost-saving technology would be more important than water saving technology for most irrigated areas. Finally, improved knowledge and information programs about the process of adjustment for farmers, farm workers, and farm communities, would be very helpful if the study's projected decline for irrigated agriculture does in fact occur.

Table 4.68. Summary of land use under the seven alternative policy models in 2000.

Land use	1964 level <sup>1</sup>	Policy model in 2000		
		Model A	Model A1	Model A2
(million acres)				
Total dryland	1,154.8	1,227.1	1,231.8	1,238.3
Annual crops	176.4	189.5	188.5	190.1
Tame hay & silages	52.7	99.1	104.7	109.4
Wild hay & pasture	921.2	938.5	938.6	938.8
Total irrigated <sup>2</sup>	31.3	27.2	22.6	17.2
Annual crops	13.3	6.1	6.4	5.1
Tame hay & silages	7.5	10.9	7.3	4.5
Wild hay & pasture & fruits, nuts, etc.	10.5	10.2	8.9	7.6
Unused cropland & hayland	55.5	16.4	15.1	12.9
Irrigable <sub>3</sub> land switched <sup>3</sup>	-	7.3	10.5	14.3
Cropland shifted <sup>4</sup>	-	49.3	49.8	49.4

<sup>1</sup>Source: (93, 186).

<sup>2</sup>Estimated at 38.5 million acres in 1969. Source: (225, 226).

Added:

<sup>3</sup>From irrigated to dryland production.

<sup>4</sup>Cropland presently in land retirement programs or used for annual crop production but used for tame hay production in 2000.

Policy model in 2000					
Model A3	Model B	Model C	Model D	Model E	Model F
(million acres)					
1,242.0	1,191.9	1,197.0	1,237.8	1,194.7	622.8
187.7	177.3	188.0	219.2	179.6	170.5
115.5	77.8	70.2	80.2	78.0	96.1
938.8	936.8	938.8	938.4	937.1	356.2
12.4	26.0	29.2	28.6	26.5	26.4
4.1	6.1	8.9	8.1	6.5	6.5
2.3	9.8	10.1	10.1	9.9	10.3
6.0	10.1	10.2	10.4	10.1	9.6
12.5	51.0	44.9	4.5	48.1	20.1
15.0	7.6	2.7	6.8	7.4	7.9
52.1	42.8	2.1	21.0	42.4	50.1

Table 4.69. Summary of water use in the 17 Western States under the seven alternative policy models in 2000.

Item	1965 level <sup>1</sup>	Policy model in 2000		
		Model	Model	Model
		A	A1	A2
(million acre feet per year)				
Total withdrawals	151.7	155.9	139.3	120.3
Total consumptive use	76.0	97.3	85.9	71.8
Agriculture <sup>2</sup>	70.0	68.1	56.7	42.6
Municipal & industrial <sup>3</sup>	6.0	22.6	22.6	22.6
Other <sup>4</sup>	n.a.	6.6	6.6	6.6
Total water supply	n.a.	239.4	239.4	239.4
Water released	-	-	11.4	25.5
Surplus water	n.a.	142.1	153.5	167.6

<sup>1</sup>Source: (216).

<sup>2</sup>Includes water consumed by crops and livestock.

<sup>3</sup>Includes water consumed by municipal and industrial uses, rural domestic, recreation, mining and thermal electric power.

<sup>4</sup>Includes water for fish and wildlife, wetlands, swamps and water exports.



Policy model in 2000					
Model A3	Model B	Model C	Model D	Model E	Model F
(million acre feet per year)					
105.0	147.1	154.6	163.3	151.7	151.7
61.1	92.0	96.6	100.9	93.3	93.8
31.9	64.3	68.9	69.7	65.6	66.1
22.6	21.1	21.1	24.6	21.1	21.1
6.6	6.6	6.6	6.6	6.6	6.6
239.4	239.4	239.4	239.4	239.4	239.4
36.2	-	-	-	-	-
178.3	147.4	142.8	138.5	146.1	145.6

Table 4.70. Production of livestock and livestock products in the United States under three alternative policy models in 2000.

Item	Unit	Actual 1969 <sup>1</sup>	Projected 2000		
			Model A	Model B	Model D
Dairy cows	thou. head	14,106	8,573	8,020	9,378
Beef cows	thou. head	36,002	85,395	79,768	73,561
Beef feeding	thou. head	24,022	63,705	59,464	71,507
Hogs	mill. lbs. <sup>2</sup>	12,953	19,531	18,230	21,225
Milk	mill. cwt	1,120	1,187	1,108	1,290
Lamb & mutton	thou. cwt <sup>2</sup>	5,082	8,478	7,262	8,914
Broilers	thou. cwt <sup>2</sup>	80,540	123,472	115,354	134,759
Turkeys	thou. cwt <sup>2</sup>	16,140	26,220	24,440	28,542
Eggs	mill. doz.	5,757	5,206	4,685	5,606

<sup>1</sup>Source: (124, 146, 154, 167).

<sup>2</sup>pork and lamb and mutton are reported in carcass weight and broilers and turkeys are reported in ready-to-cook weight.

Table 4.71. Average prices received by farmers for selected crops and livestock in the United States under the nine alternative policy models in 2000.<sup>1</sup>

Item	Unit	Actual 1969 <sup>2</sup>	Projected 2000		
			Model A	Model A1	Model A2
Crop prices <sup>3</sup>					
Corn-sorghum	dol./bu.	1.12	1.10	1.13	1.19
Barley-oats <sup>4</sup>	dol./bu.	0.88	1.02	1.05	1.11
Soybeans	dol./bu.	2.33	2.25	2.34	2.54
Wheat	dol./bu.	1.24	1.49	1.52	1.61
Cotton	dol./lb	0.21	0.14	0.15	0.16
Sugar beets	dol./ton	n.a.	8.62	8.71	8.92
Hay	dol./ton	25.00	25.01	26.01	27.81
Silage <sup>5</sup>	dol./ton	n.a.	7.09	7.37	7.82
Livestock-products <sup>6</sup>					
Cattle & calves	cents/lb <sup>7</sup>	26.20	33.90	34.88	36.70
Hogs	cents/lb <sup>7</sup>	22.20	15.26	15.63	16.32
Milk	dol./cwt	5.46	3.41	3.44	3.51

<sup>1</sup>All prices for 2000 are measured in 1970 equivalent dollars and do not take into account inflation from 1970 to 2000.

<sup>2</sup>Source: (165).

<sup>3</sup>Corn equivalent.

<sup>4</sup>Barley equivalent.

<sup>5</sup>Wet tons.

<sup>6</sup>Farm prices of 24.5 cents per pound for lambs, 15.0 cents per pound for broilers and 35.0 cents per dozen for eggs are assumed under all policy models in 2000.

<sup>7</sup>Live weight prices.

Projected 2000					
Model A3	Model B	Model C	Model D	Model E	Model F
1.21	0.93	1.38	1.58	0.94	1.05
1.13	0.90	1.30	1.54	0.91	0.97
2.58	1.78	2.89	3.80	1.83	2.10
1.65	1.22	1.93	2.25	1.23	1.41
0.16	0.14	0.23	0.20	0.15	0.14
8.97	8.15	13.15	10.69	6.57	8.40
28.22	21.10	39.40	33.46	21.25	23.88
7.92	6.18	10.27	9.00	6.21	6.86
37.07	29.93	46.62	37.57	30.08	32.81
16.48	13.45	17.92	16.85	13.58	14.76
3.53	3.22	3.77	4.38	3.25	3.34