GUIDELINES FOR SOFTWARE DEVELOPMENT, DOCUMENTATION AND REVIEW

I. General Policies

A. <u>General:</u> It is the policy of Colorado State University Cooperative Extension that software offered to its clients on a statewide or region-wide basis will be subject to the same policies and practices that govern other forms of Extension publishing (i.e., preapproval, standards and quality guidelines, peer review, numbering system, etc.). Likewise, software that may be developed for use only within Extension offices or only for use with a limited audience in an office or small geographic area may be produced locally without the requirement that it be published in Extension's official, numbered series.

B. <u>Review:</u> All software produced for distribution or sale, whether published in a numbered series or distributed locally, is subject to the same review policies as all Extension materials and must be coordinated with or reviewed by subject-matter specialists prior to release.

C. <u>Hardware and Software:</u> At present Colorado State University Cooperative Extension publishes software only for IBM-PC and compatible computers. Developers shall consult with the Extension Computer Applications Specialist concerning current hardware and software standards.

D. <u>Annual Merit:</u> Software should carry the same weight for specialist and agent annual evaluations as do comparable printed publications.

E. <u>Exceptions:</u> Due to government programs, grants or other unforeseen events, there may be last minute types of applications that require immediate attention. These are not exempt from review; rather, every effort will be made to expedite such applications.

II. Planning Phase

Prior to developing a new computer program, or when submitting an existing program for official release, the author(s) will submit:

A. <u>Statement of problem</u>: objectives and justification; potential users (who and how many); why computer is best approach to problem; review of similar applications, both public and private, why they are not suitable to the problem and why a new program is needed.

B. <u>Programming procedure</u>: spreadsheet, database management system, or language to be used; data, variables, formulas and parameters; input and output; assumptions, interpretation and documentation to be developed.

C. <u>Estimated development costs</u>: hours of specialist, agent, programmer time; supplies, etc. Identify expected funding source for program development (Extension, department, grant). Identify funding and

individual(s) responsible for program support (maintenance, trouble-shooting).

D. <u>Development schedule</u>: when programming is to begin, when application will be ready for testing, when final release will be ready.

E. <u>Approval by the following</u>:
1. Department Head
2. Extension Computer Applications Committee
3. Program Leader/Assistant Director

III. Programming, Documentation, Testing, Review

A. <u>Programming</u>: So all CSU software works in a similar manner, a consistent format should be developed that all applications should follow as closely as possible. Authors and programmers should be told of this format in advance.

B. <u>Documentation</u> should include the following, as appropriate:

1. Contents
2. Assumptions about user
3. Assumptions about the problem and methods used to solve it
4. Installation instructions
5. Name, address, phone number for support
6. Help for beginning user
7. Quick reference for advanced user
8. Annotated sample run and sample output
9. Interpretation of results
10. References, bibliography
11. Index (optional)

C. <u>Review</u> should include, as appropriate:

1. Campus specialist(s), including computer applications specialist and publications specialist, as well as at least one subject matter specialist
2. Field agent(s)
3. End user(s) (farmers, homemakers, 4-H'ers, as appropriate)

Program and documentation will be reviewed for:

1. Accuracy; usefulness; appropriateness to problem
2. Ease of use; operations; bugs
3. Appearance and readability of computer screens, output, documentation.

IV. Production and Marketing

A. <u>Marketing</u>: author(s) must help develop a marketing plan and participate in promotion efforts.

B.   Copyright, disclaimer: All software will be copyrighted to CSU and
     will include a disclaimer statement that we take no responsibility
     whatsoever for the accuracy or usefulness of the software.

C.   Packaging: Cover sheets for program documentation will be printed
     in quantity, and contents on an as needed basis. Programs and
     documentation will be distributed on media specified by the Extension
     Computer Applications Specialist.

D.   Distribution: The Bulletin Room will distribute all software listed
     in the CSU software catalog, both that developed at CSU and that
     acquired from other sources.

     The Bulletin Room will maintain a list of those purchasing a program
     so as to notify them of new software or program revisions. Buyers
     of record are entitled to one free update of the purchased program.
     Thereafter they are entitled to updates at a reduced cost, estab-
     lished individually for each program.

     Agents are encouraged to refer people to the Bulletin Room to pur-
     chase software, rather than distributing it themselves. This en-
     sures that buyers get the most recent version and that their names
     get on the list for upgrades and new programs.

     Programs will be priced individually. The program price will be high
     enough to cover the cost of promotional copies and other materials
     (flyers, etc.). Colorado Cooperative Extension campus and field
     offices will receive a discount of 50% and Cooperative Extension in
     other states will receive a discount of 30%.

     Proceeds from software sales will be distributed as follows:

          Bulletin Room: A flat fee to cover distribution costs (disks,
          postage, packaging, documentation). Fee established individu-
          ally for each program.

          Balance: The balance will be put into a revolving fund to
          support maintenance of existing applications and development
          of new applications.

          Grandfather clause: The above distribution policy does not
          affect distribution of proceeds for software in place as of
          July 1, 1988, unless the author gives express consent.

E.   Catalog: A catalog of computer software and computer-related pub-
     lications will be updated each year. Items which have not sold any
     copies for one year will be dropped from the catalog, unless there
     is a valid reason to continue to list them.